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Chemical Thermodynamic Properties of Compounds of Sodium, Potassium and Rubidium: An Interim Tabulation of Selected Values

D. D. Wagman, W. H. Evans, V. B. Parker and R. H. Schumm

Physical Chemistry Division
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Prepared for
Office of Standard Reference Data, NBS

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ABSTRACT

Selected values are given for the thermochemical properties of the more common compounds of sodium and potassium. A more extensive set of selections is provided for rubidium compounds. The properties included, where data are available, are enthalpy of formation at 0 K and 298.15 K, $\Delta Hf(0)$ and $\Delta Hf(298)$, Gibbs energy of formation, entropy and heat capacity at 298.15 K; $\Delta Gf(298)$, S(298) and Cp(298), and the enthalpy difference between 0 K and 298.15 K, H(298)-H(0). The values are consistent with the tables issued earlier in the NBS Technical Note 270 series.

Keywords: Enthalpy; entropy; Gibbs energy; heat capacity; potassium compounds; rubidium compounds; sodium compounds; standard reference data; thermochemical tables.

1. Introduction

This is an interim report on the evaluation of chemical thermodynamic properties of compounds of three of the alkali metals. It supplements the extensive set of selected values of chemical thermodynamic properties published as NBS Technical Note 270, parts 1-7. [1]. The values contained in this report are consistent with those in NBS Technical Note 270 and may be combined with them to establish the thermodynamic properties of processes.

Three tables are given here for the more common compounds of sodium and potassium and for all rubidium compounds for which data are available.

The tables contain values of the enthalpy and Gibbs energy of formation, $\Delta Hf°$ and $\Delta Gf°$, entropy, S°, and heat capacity, Cp°, all at 298.15 K (25°C), the enthalpy of formation at 0 K, $\Delta Hf°$, and the enthalpy difference between 0 K and 298 K, H°(298)-H°(0). The substances included are inorganic compounds of these elements, compounds containing organic ligands that have one or two carbon atoms and their aqueous solutions.

No values are given in these tables for metal alloys or other solid solutions, fused salts, or for substances of undefined chemical composition.

The sodium and potassium tables are incomplete. They list properties of compounds evaluated in the course of preparing selections for compounds already published in the NBS Technical Note 270 series and an extensive collection of the properties of neutral electrolytes in aqueous solution at the hypothetical standard state of unit activity. The latter were calculated as the sum of the properties of the ions. Although selections will be needed for the properties of many more compounds of sodium and potassium, the selections given here should be sufficient for solution of a wide range of thermochemical problems.

The rubidium table is the complete set of selections now planned for inclusion in NBS Technical Note 270. It was prepared late in 1975. There may be a few revisions and additions based on newly reported data.

Users of these three tables are invited to comment on the selections, suggest substances for which values of properties are needed, correct errors and bring new measurements to our attention. All of these will help us improve the final tables.

2. Explanation of the contents of the tables

The following material, adapted from NBS Technical Note 270, provides definitions and conventions used in the tables.

2.1 Chemical Formulae and Physical States

The tables were reproduced from computer printout in which only capital (upper case) letters are available. Normal one-line chemical formulae are used, with the following modifications:

- Subscripts (counts of atoms) and superscripts (charge) are printed on line: NA2O2 = Na_2O_2, NA+ = Na^+.

- The digit "1" appears wherever necessary to separate the symbols of two chemical elements: NA1N1O3 = $NaNO_3$.

- The centered dot, used in hydrates and minerals, is shown as a colon: NA1V1O4:2H2O = $NaVO_4 \cdot 2H_2O$.

- The physical state of the substance is appended to the chemical formula in parentheses: NA1O1H(C) = NaOH, crystalline. The abbreviations most commonly used to denote physical states are listed in Table A. Any other notations are explained in comments within the tables.

2.2 Definition of Symbols for Thermochemical Properties

The headings used in the tables and their meanings are:

DHO $\equiv \Delta Hf^\circ_0$, standard heat of formation at 0 K;

DH298 $\equiv \Delta Hf^\circ$, standard heat of formation at 298.15 K;

DG298 $\equiv \Delta Gf^\circ$, standard Gibbs energy (formerly free energy), G, of formation at 298.15 K;

H298-HO $\equiv H^\circ_{298}-H^\circ_0$, enthalpy, H, of the compound in the indicated state at 298.15 K referred to its value at 0 K. If the indicated state at 298 K is gas, the corresponding state at 0 K is the hypothetical ideal gas; if the state at 298 K is solid or liquid, the corresponding state at 0 K is the thermodynamically stable crystalline solid, unless otherwise specifically indicated.

S298 $\equiv S^\circ$, standard entropy, S, at 298.15 K;

C298 $\equiv Cp^\circ$; specific heat at constant pressure at 298.15 K.

The Gibbs free energy is related to the other quantities by: $G = H-TS$, where T is the thermodynamic temperature. The enthalpy is related to the internal energy, E, by: $H = E + PV$, where P = pressure and V = volume.

All values refer to one mole of substance for the formula given.

2.3 Conventions Regarding Pure Substances

The values of the thermodynamic properties of the pure substances given in these tables are for the substances in their standard states. These standard states are defined as follows:

For a pure solid or liquid, the standard state at any temperature is the substance in the condensed phase under a pressure of one atmosphere.

For a gas the standard state at any temperature is the hypothetical ideal gas at unit fugacity, in which state the enthalpy is that of the real gas at the same temperature and at zero pressure.

The phase of a substance is indicated in parentheses at the end of the chemical formula. See section 2.1.

The values of ΔHf° and ΔGf° given in the tables represent the change in the appropriate thermodynamic quantity when one mole of the substance in its standard state is formed, isothermally at the indicated temperature, from the elements, each in its appropriate standard reference state. The standard reference state at 25°C for each element except phosphorus has been chosen to be the standard state that is thermodynamically stable at 25°C and at one atmosphere pressure.

For phosphorus the standard reference state is the crystalline white form; the more stable forms have not been well characterized thermochemically. The same reference states have been maintained for the elements at 0 K except for the liquid elements bromine and mercury for which the reference states have been chosen as the stable crystalline forms. The standard reference states for the elements are indicated in the tables by the fact that the values of $\Delta Hf°$ and $\Delta Gf°$ are exactly zero.

The values of S° represent the virtual or "thermal" entropy of the substance in the standard state at 298.15 K, omitting contributions from nuclear spins. Isotope mixing effects, etc., are also excluded except in the case of the hydrogen-deuterium (^1H-^2H) system. Where data have been available only for a particular isotope, they have been corrected when possible to the normal isotopic composition.

The values of the enthalpies of formation of gaseous ionic species are computed on the convention that the value of $\Delta Hf°$ for the electron is zero. Conversions between 0 and 298.15 K are calculated using the value of $H^\circ_{298}-H^\circ_0 = 1.481$ kcal per mole of electrons, and assuming that the values of $H^\circ_{298}-H^\circ_0$ for the ionized and un-ionized molecules are the same.

2.4 Convention Regarding Solutions

For all dissolved substances the composition of the solvent is indicated in parentheses following the chemical formula. Except in special cases, discussed below, the number of moles of the solvent associated with one mole of solute is stated explicitly. See section 2.1 and Table A for the conventions used.

In some cases the concentration of the solute can not be specified. These are indicated as "AU" (aqueous, unspecified) for water solutions and by "U" for non-aqueous and mixed media. In all these cases the solution may be assumed to be "dilute".

The standard state for a non-dissociated solute in aqueous solution is taken as the hypothetical ideal solution of unit molality, which has been designated as "std. state, m = 1". For strong electrolytes in aqueous solution the conventional standard state is the ideal solution of unit activity (unit mean molality). For non-aqueous solutions the standard state of the solute is the hypothetical ideal solution of unit mole fraction of solute (std. state, $x_2 = 1$). The designation "A" is used for strong electrolytes in the standard state and "AO" for undissociated species in water solution. In non-aqueous media the standard state defined above is indicated by appending "X" to the formula of the solvent. The convention "std. state, m = 1" is used only rarely for non-aqueous media. For it, an "M" is appended to the formula of the solvent.

The value of $\Delta Hf°$ for a solute in its standard state is equal to the apparent molal enthalpy of formation of the substance in the infinitely dilute real solution, since the enthalpy of dilution of an ideal solution is zero. At this dilution the partial molal enthalpy is equal to the apparent molal quantity. At concentrations other than the standard state, the value of $\Delta Hf°$ represents the apparent enthalpy of the reaction of formation of the solution from the elements comprising the solute, each in its standard reference state, and the appropriate total number of moles of solvent. In this representation the value of $\Delta Hf°$ for the solvent is not required. The experimental value for a heat of dilution is obtained directly as the difference between the two values of $\Delta Hf°$ at the corresponding concentrations. At finite concentrations the partial molal enthalpy of formation differs from the apparent enthalpy.

The values of the thermodynamic properties tabulated for the individual ions in aqueous solution are based on the usually convention that the values of $\Delta Hf°$, $\Delta Gf°$, $S°$ and $Cp°$ for H^+ (aq, std. state, m = 1) are zero. The properties of a neutral electrolyte in aqueous solution in the standard state are equal to the algebraic sum of these values for the appropriate kinds and numbers of individual ions assumed to constitute the molecule of the given electrolyte. For an ionic species e.g., HSO_4^-, the properties tabulated refer to that undissociated ion, i.e. they are not equal to the sum of those for its constituent ions. By adopting the above convention with respect to aqueous H^+, it follows that the thermodynamic relation $\Delta Hf° = \Delta Hf° - T(\Delta Sf° + n \cdot 0.5 S°(H_2))$ holds for individual ionic species, with n equal to the algebraic value of the charge. For neutral electrolytes (and gaseous ions) the normal consistency relationship applies. See section 4.

3. Unit of Energy and Fundamental Constants

All of the energy values given in these tables are expressed in terms of the thermochemical calorie. This unit, defined as equal to 4.1840 joules, is generally accepted for the presentation of chemical thermodynamic data. Values reported in other units have been converted to calories by means of the conversion factors for molecular energy given in Table B.

The following values of the fundamental physical constants have been used in these calculations:

R = gas constant = 8.3143 ± 0.0012 J/deg mol = 1.98717 ± 0.00029 cal/deg mol

F = Faraday constant = 96487.0 ± 1.6 coulombs/mol = 23060.9 ± 0.4 cal/volt equivalent

$Z = Nhc = 11.96258 \pm 0.00107$ J/cm^{-1} mol = 2.85912 ± 0.00026 cal/cm^{-1} mol

c_2 = second radiation constant = hc/k = 1.43879 ± 0.00015 cm deg

0°C = 273.15 K

These constants are consistent with those given in the Table of General Physical Constants, recommended by the National Academy of Sciences-National Research Council [2].

These values differ slightly from those recommended by CODATA [3] in 1973. However, adoption of the CODATA recommendations would change the values in the present tables by far less than their uncertainties (see section 4.1). Thus the present values may be said to be consistent with the 1973 set of fundamental constants. The formula weights in the tables have been calculated from the molecular formula using the 1961 Table of Relative Atomic Weights based on the atomic mass of $^{12}C = 12$ exactly [4]. Values are given to four decimals places for convenience in the computer processing. Use of the more recent atomic weights [8] would produce only insignificant changes in the tabulated thermodynamic values.

4. Internal Consistency of the Tables

All of the values given in these tables have been calculated from the original articles, using consistent values for all subsidiary and auxiliary quantities. The original data were corrected where possible for differences in energy units, molecular weights, temperature scales, etc. Thus we have sought to maintain a uniform scale of energies for all the substances in the tables. In addition the tabulated values of the properties of a substance satisfy all the known physical and thermodynamic relationships among these properties. The quantities $\Delta Hf°$, $\Delta Gf°$, and $S°$ at 298.15 K satisfy the relation:

$$\Delta Gf° = \Delta Hf° - T\,\Delta Sf°.$$

to the precision given. The special case of solutions is discussed in section 2.4. Furthermore the calculated value of any thermodynamic quantity for a reaction is independent of the path chosen for the evaluation.

In some cases newer data may have become available on certain substances after the values were selected for these tables. Because of the need to maintain the internal consistency of the tables, it is not always possible to incorporate these newer data into the tables without a detailed analysis of the effect of such a change. Unless great care is used, relatively significant errors in calculated values of $\Delta H°$ or $\Delta G°$ for specific reactions may result from the introduction of such data. See section 4.2.

4.1 Uncertainties

The uncertainty in any value in the tables depends on the uncertainties of all the determinations in the total chain of reactions used to establish the value.

In general, when uncertainties are not stated explicitly certain rules have been followed with respect to the number of significant figures recorded. Values are tabulated such that the overall uncertainty lies between 2 and 20 units of the last figure. On the other hand, values are given so that the experimental data from which they are derived may be recovered with an accuracy equal to that of the original quantities. Thus the number of significant figures for any one value in the tables need not represent the absolute accuracy of that value. For solutions of varying composition, values are frequently tabulated to more figures to make possible the recovery of enthalpies of solution and dilution. Similarly values of ΔHf°_{0} and $\Delta Hf^{\circ}_{298.15}$ may be given to different numbers of significant figures. In this instance the quantity with the lesser number of figures is used to represent the uncertainty estimate. The larger number of figures is used for the other quantity to retain the significance of the temperature correction term.

The remarks above apply directly to the tables on sodium and potassium compounds. For rubidium uncertainties are stated explicitly immediately below the value of each property. (The form is +-0.05, where +- means ±).

4.2 Relationship to Other Tables of Thermodynamic Properties

The chemical thermodynamic properties in the present table may be combined with those published in NBS Technical Note 270 [1] in order to calculate the change in a property for a process. However we recommend against these values being combined with those in any other tabulation or with a property reported in an original research paper. In particular, we warn against indiscriminate combination with the CODATA Key Values for Thermodynamics [5-7].

There are several reasons for avoiding the combination of thermochemical data from more than one table. The most important is that different large-scale tables use different thermochemical properties of formation for substances that are ubiquitous in thermochemical measurements. Outstanding examples are the common inorganic acids and their ions. Another reason is that the groups preparing different tables may have relied on different measurements as the basis for selecting property values.

It is difficult to predict a priori how a change in one selected formation property would affect values assigned to other substances because of the way these are linked by complex networks. In general, it may be expected that the advantage of internal consistency of a table will be lost if values from several sources are combined and that experimental measurements may be reproduced poorly.

No general, simple algorithm can be suggested for overcoming this problem. If it becomes necessary to extend a table of data to substances other than those tabulated, the user is advised to consult the group that prepared the table about the procedure that he plans to use.

5. Arrangement of the Tables

The compounds in the tables are entered according to the Standard Order of Arrangement, (see Figure 1), by the principle of latest position. In this scheme, a compound is listed under the element occurring latest in the list; water of hydration is neglected. Within a given element-table will be found all of the compounds of that element with elements occurring earlier in the order; the arrangement within a table follows the same ordering.

The selections for rubidium compounds were made late in 1975 by W. H. Evans. Those for sodium and potassium have been made by all of us and by former members of the Chemical Thermodynamics Data Center during the past decade. The extensive collection of properties of electrolytes in aqueous solution was prepared by R. H. Schumm. The tables have been printed using computer programs that are modifications of ones developed by Dr. J. B. Pedley, University of Sussex, Brighton, England, for the CATCH System of Thermochemical Tables.

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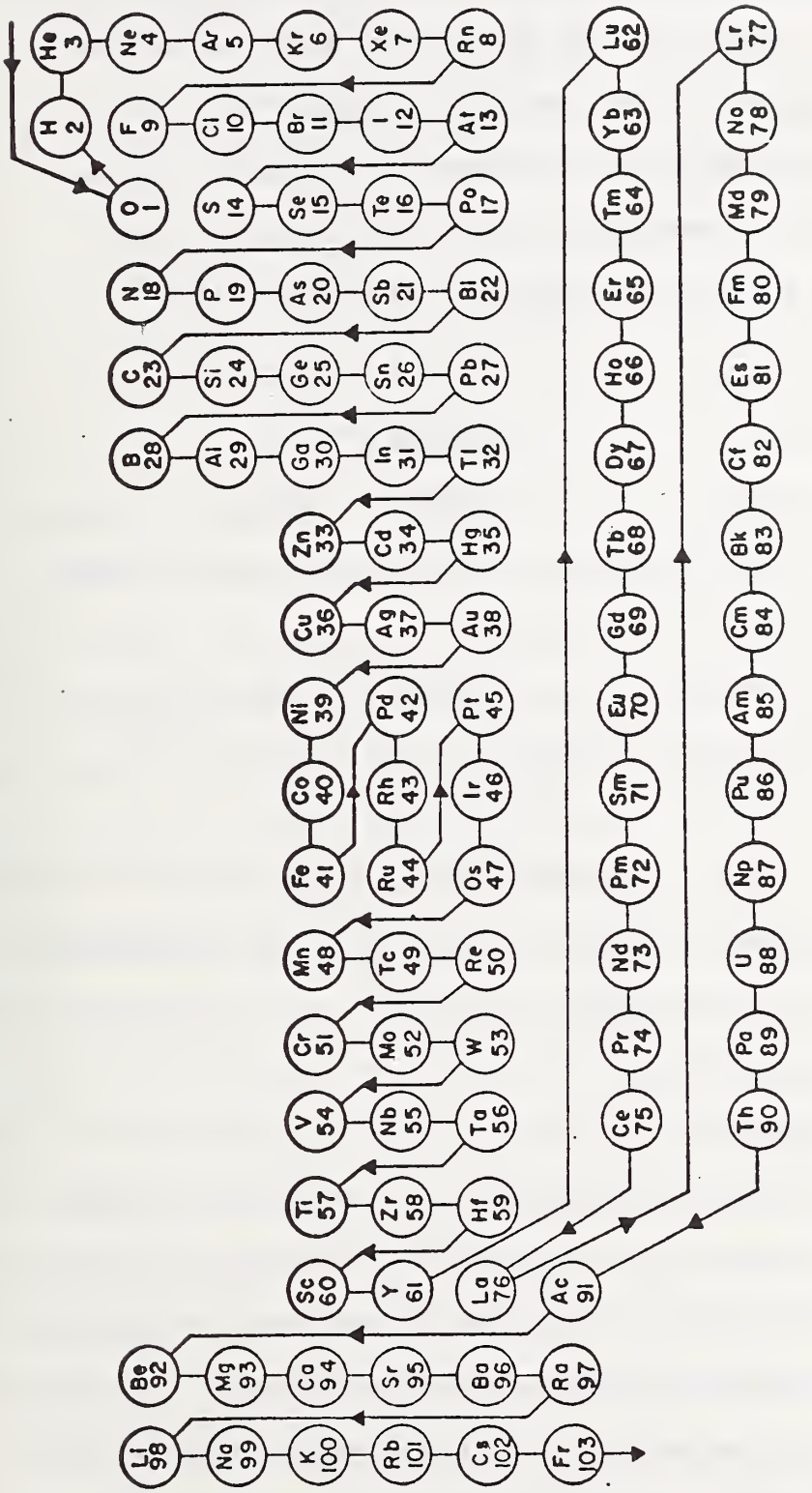

Standard Order of Arrangement of the Elements and Compounds based on the Periodic Classification of the Elements

Figure 1

TABLE A: Physical State Conventions

The following conventions are used to designate the physical state of a substance. These apply to the attached table and to the NBS Thermochemical Data Bank. This information appears in a parenthetical expression appended to the molecular formula. Some of the explanations imply a thermochemical value, particularly those for solutions. These normally are used in describing enthalpy measurements.

Basic Symbols	Explanation
(G)	Gaseous, e.g., in H1CL(G) for $HC\ell(g)$
(GS)	Gaseous reference standard state for an element, e.g., O2(GS) for $O_2(g)$
(C)	Crystalline, e.g., in N1H4CL(C) for $NH_4C\ell(c)$
(CS)	Crystalline reference standard state for an element, e.g., in RB(CS) for Rb(c)
(L)	Liquid, e.g., in H2O(L) for $H_2O(\ell)$
(LS)	Liquid reference standard state for an element, e.g., in BR2(LS) for $Br_2(\ell)$
(AM)	Amorphous
(GL)	Glassy
(A)	Hypothetical standard state of the ideal aqueous solution at unit activity. For a neutral electrolyte the value of a property is equal to the algebraic sum of the values for the ions assumed to constitute the molecule of the electrolyte, e.g. $HC\ell(A) = H^+(A) + C\ell^-(A)$. For an ionic species this notation is commonly used to refer to the undissociated ion as written. e.g. $HSO_4^-(A)$

Symbol	Explanation
(AO)	Hypothetical standard state of the ideal aqueous solution at unit activity of the undissociated (non-ionized) species, e.g. HF(AO), HF_2^-(AO). May also be used whenever the designation (A) could be ambiguous. Note that the descriptions HSO_4^-(A) and HSO_4^-(AO) are equivalent, but that HF(A) and HF(AO) are not.
(AU)	Aqueous solution of undefined, but usually dilute, concentration, e.g. XeO_3(AU).

The symbols used above occasionally are modified by numbers to distinguish two substances in the same state that have the same molecular weight, as for isomers,: (AU2), (C3). They are also used in combination with descriptive material, e.g. (C:HE), (C:AL) etc. to mean "crystalline, hexagonal", "crystalline, alpha form" etc.

Special notations for substances in solutions

The notations for the "state" of a substance in solution may combine a definition of the system, e.g. HCℓ in 220 moles of water, and a specification of the thermochemical property associated with it. Usually the thermochemical property is the apparent integral enthalpy or free energy of formation or an absolute entropy, i.e. the formation properties of the solvent are not included. If a partial molal property is tabulated the notation D: ("D" for "differential") occurs as the first term in the state bracket. The notations given below illustrate the differences for integral and differential (partial molal) properties, and extrapolated values. Examples are given for aqueous, mixed, and non-aqueous solvents.

Symbol	Explanation
H1CL(200H2O)	An aqueous solution of specified composition, e.g. one mole of HCℓ in 200 moles H_2O. The value of ΔHf represents the apparent integral enthalpy of formation.
H1CL(D:200H2O) and H2O(D:H1CL+200H2O)	These represent the partial molal (enthalpy) of formation of the substance in a solution of specified concentration, e.g. the partial molal enthalpy of formation of HCℓ and H_2O respectively, in a solution consisting of 1 mole HCℓ and 200 moles H_2O.
U1CL4(H1CL104+50H2O)	This describes a solute dissolved in a mixed solvent, e.g. one mole of $UCℓ_4$ in a mixture of 1 mole of $HCℓO_4$ and 50 moles H_2O. The value of ΔHf represents the apparent integral enthalpy of formation of the substance, $UCℓ_4$, in the medium.
U1CL4(H1CL104+ 50H2O:AU)	This represents a solute at an unspecified but usually dilute concentration in a solvent mixture of fixed composition.

Symbol	Explanation
U1CL4(D:H1N103+50H20)	Specifies the partial molal (enthalpy) of formation of a substance in a mixed medium, e.g. the enthalpy of formation of 1 mole of $UC\ell_4$ in a large amount of a solution containing $UC\ell_4$, HNO_3 and H_2O in the molar ratios 1:1:50.
U1CL4(L(H1CL):AU)	Specifies a thermochemical value extrapolated from those in a particular type of solution, e.g. the integral (enthalpy) of formation of $UC\ell_4$ at an unspecified concentration in water solution obtained by extrapolation from values in solutions containing $HC\ell$ at varying concentrations.
RB1I(C1H3C1N:S)	Ideal solution of a substance (RbI) in a non-aqueous solvent (CH_3CN), the substance being in the standard state of unit activity on the molal scale unless otherwise indicated. (In some early entries in the Data Bank these are written ambiguously as (C1H3C1N)).
RB1I(C1H3C1N:U)	Solution of a substance (RbI) in a non-aqueous solvent (CH_3CN) at an unspecified concentration. This is analogous to (AU).
RB1I(1000C1H3C1N)	Solution of a substance (RbI) in a non-aqueous solvent (CH_3CN) at a specified concentration.

TABLE B

CONVERSION FACTORS FOR UNITS OF MOLECULAR ENERGY

	J/mol	cal/mol	cm^3 atm/mol	kWh/mol	Btu/lb-mol	cm^{-1}/molecule	eV/molecule
1 J/mol =	1	2.390057×10^{-1}	9.86923	2.77778×10^{-7}	0.429923	8.35940×10^{-2}	1.036409×10^{-5}
1 cal/mol =	4.18400	1	41.2929	1.162222×10^{-6}	1.798796	3.49757×10^{-1}	4.33634×10^{-5}
1 cm^3 atm/mol =	0.1013250	2.42173×10^{-2}	1	2.81458×10^{-8}	4.35619×10^{-2}	8.47016×10^{-3}	1.050141×10^{-6}
1 kWh/mol =	3,600,000	860,421	3.55292×10^{7}	1	1,547,721	300,938	37.3107
1 Btu/lb-mol =	2.32600	5.55927×10^{-1}	22.9558	6.46111×10^{-7}	1	1.944396×10^{-1}	2.41069×10^{-5}
1 cm^{-1}/molecule =	11.96258	2.85912	118.0614	3.32294×10^{-6}	5.14299	1	1.239812×10^{-4}
1 eV/molecule =	96487.0	23060.9	952,252	2.68019×10^{-2}	41482.0	8065.73	1

The underlined numbers represent the fundamental values used in deriving this table. The remaining factors were obtained by applying the relationships:

$$n_{ij} = n_{ik} \cdot n_{kj} \qquad n_{ii} = n_{ik} \cdot n_{ki} = 1$$

TABLES OF SELECTED VALUES OF THERMODYNAMIC PROPERTIES

Enthalpy of Formation at 0 K

Enthalpy of Formation at 298.15 K

Gibbs Energy of Formation at 298.15 K

Enthalpy at 298.15 K

Entropy at 298.15 K

Heat Capacity at 298.15 K

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
1	NA(CS)	22.9898	0	0	0	1.54	12.24	6.75
2	NA(G)	22.9898	25.663	25.60	18.30	1.481	36.712	4.968
3	NA+(A)	22.9898		-57.39	-62.593		14.1	11.1
4	NA2O(C)	61.9790		-99.7				
5	NA2O2(C)	77.9784		-122.30				
6	NA1O1H1(C)	39.9972		-101.723				
7	NA1O1H(A)	39.9972		-112.36	-100.187		11.5	-24.4
8	NA1O1H(2.5H2O)	39.9972		-108.100				
9	NA1O1H(3H2O)	39.9972		-109.053				
10	NA1O1H(4H2O)	39.9972		-110.405				
11	NA1O1H(4.5H2O)	39.9972		-110.847				
12	NA1O1H(5H2O)	39.9972		-111.182				
13	NA1O1H(6H2O)	39.9972		-111.633				
14	NA1O1H(8H2O)	39.9972		-112.071				
15	NA1O1H(10H2O)	39.9972		-112.248				
16	NA1O1H(12H2O)	39.9972		-112.326				
17	NA1O1H(15H2O)	39.9972		-112.370				
18	NA1O1H(20H2O)	39.9972		-112.380				
19	NA1O1H(25H2O)	39.9972		-112.364				
20	NA1O1H(30H2O)	39.9972		-112.347				
21	NA1O1H(40H2O)	39.9972		-112.316				
22	NA1O1H(50H2O)	39.9972		-112.293				
23	NA1O1H(75H2O)	39.9972		-112.261				
24	NA1O1H(100H2O)	39.9972		-112.248				
25	NA1O1H(150H2O)	39.9972		-112.242				
26	NA1O1H(200H2O)	39.9972		-112.239				
27	NA1O1H(300H2O)	39.9972		-112.244				
28	NA1O1H(500H2O)	39.9972		-112.256				
29	NA1O1H(800H2O)	39.9972		-112.270				
30	NA1O1H(1000H2O)	39.9972		-112.276				
31	NA1O1H1(1500H2O)	39.9972		-112.288				
32	NA1O1H(2000H2O)	39.9972		-112.295				
33	NA1O1H1(3000H2O)	39.9972		-112.305				
34	NA1O1H1(5000H2O)	39.9972		-112.316				
35	NA1O1H1(7000H2O)	39.9972		-112.322				
36	NA1O1H1(10000H2O)	39.9972		-112.328				
37	NA1O1H1(20000H2O)	39.9972		-112.337				
38	NA1O1H1(50000H2O)	39.9972		-112.345				
39	NA1O1H(100000H2O)	39.9972		-112.349				
40	NA1O1H(00H2O)	39.9972		-112.36				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
41 NA1O1H:H2O(C)	58.0126		-175.557				
42 NA1H1O2(A)	55.9966		-95.71	-78.7		19.8	
SODIUM HYDROPEROXIDE; FROM NA+. HO2-							
43 NA1F(C)	41.9882		-137.108				
44 NA1F(A)	41.9882		-136.89	-129.23		10.8	-14.4
45 NA1F(50H2O)	41.9882		-136.833				
46 NA1F(75H2O)	41.9882		-136.798				
47 NA1F(100H2O)	41.9882		-136.783				
48 NA1F(150H2O)	41.9882		-136.775				
49 NA1F(200H2O)	41.9882		-136.771				
50 NA1F(300H2O)	41.9882		-136.775				
51 NA1F(500H2O)	41.9882		-136.786				
52 NA1F(800H2O)	41.9882		-136.800				
53 NA1F(1000H2O)	41.9882		-136.806				
54 NA1F(1500H2O)	41.9882		-136.818				
55 NA1F(2000H2O)	41.9882		-136.825				
56 NA1F(3000H2O)	41.9882		-136.835				
57 NA1F(5000H2O)	41.9882		-136.846				
58 NA1F(7000H2O)	41.9882		-136.852				
59 NA1F(10000H2O)	41.9882		-136.858				
60 NA1F(20000H2O)	41.9882		-136.867				
61 NA1F(50000H2O)	41.9882		-136.875				
62 NA1F(100000H2O)	41.9882		-136.879				
63 NA1F(00H2O)	41.9882		-136.89				
64 NA1H1F2(A)	61.9946		-212.73	-200.77		36.2	
SODIUM BIFLUORIDE. FROM NA+, HF2-							
65 NA1CL(C)	58.4428		-98.268	-91.842		17.33	
66 NA1CL(A)	58.4428		-97.34	-93.965		27.6	-21.5
67 NA1CL(9H2O)	58.4428		-97.820				
68 NA1CL(10H2O)	58.4428		-97.809				
69 NA1CL(12H2O)	58.4428		-97.770				
70 NA1CL(15H2O)	58.4428		-97.707				
71 NA1CL(20H2O)	58.4428		-97.614				
72 NA1CL(25H2O)	58.4428		-97.547				
73 NA1CL(30H2O)	58.4428		-97.496				
74 NA1CL(40H2O)	58.4428		-97.425				
75 NA1CL(50H2O)	58.4428		-97.381				
76 NA1CL(75H2O)	58.4428		-97.320				
77 NA1CL(100H2O)	58.4428		-97.291				
78 NA1CL(150H2O)	58.4428		-97.266				
79 NA1CL(200H2O)	58.4428		-97.257				
80 NA1CL(300H2O)	58.4428		-97.252				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
81	NA1CL(500H2O)	58.4428		-97.255				
82	NA1CL(800H2O)	58.4428		-97.262				
83	NA1CL(1000H2O)	58.4428		-97.267				
84	NA1CL(1500H2O)	58.4428		-97.276				
85	NA1CL(2000H2O)	58.4428		-97.281				
86	NA1CL(3000H2O)	58.4428		-97.289				
87	NA1CL(5000H2O)	58.4428		-97.298				
88	NA1CL(7000H2O)	58.4428		-97.303				
89	NA1CL(10000H2O)	58.4428		-97.309				
90	NA1CL(20000H2O)	58.4428		-97.318				
91	NA1CL(50000H2O)	58.4428		-97.326				
92	NA1CL(100000H2O)	58.4428		-97.329				
93	NA1CL(00H2O)	58.4428		-97.34				
94	NA1CL3(A)	129.3488			-91.4			
95	NA1CL1O(A)	74.4422		-83.0	-71.4		24.	
96	NA1CL1O2(C)	90.4416		-73.38				
97	NA1CL1O2(A)	90.4416		-73.3	-58.5		38.3	
98	NA1CL1O2:3H2O(C)	144.4878		-285.08				
99	NA1CL1O3(C)	106.4410		-86.3				
100	NA1CL1O3(A)	106.4410		-81.1	-63.4		52.9	
101	NA1CL1O3(6H2O)	106.4410		-82.78				
102	NA1CL1O3(8H2O)	106.4410		-82.57				
103	NA1CL1O3(10H2O)	106.4410		-82.41				
104	NA1CL1O3(12H2O)	106.4410		-82.28				
105	NA1CL1O3(15H2O)	106.4410		-82.11				
106	NA1CL1O3(20H2O)	106.4410		-81.91				
107	NA1CL1O3(25H2O)	106.4410		-81.78				
108	NA1CL1O3(30H2O)	106.4410		-81.67				
109	NA1CL1O3(40H2O)	106.4410		-81.53				
110	NA1CL1O3(50H2O)	106.4410		-81.43				
111	NA1CL1O3(75H2O)	106.4410		-81.30				
112	NA1CL1O3(100H2O)	106.4410		-81.23				
113	NA1CL1O3(150H2O)	106.4410		-81.16				
114	NA1CL1O3(200H2O)	106.4410		-81.12				
115	NA1CL1O3(300H2O)	106.4410		-81.09				
116	NA1CL1O3(500H2O)	106.4410		-81.06				
117	NA1CL1O3(1000H2O)	106.4410		-81.05				
118	NA1CL1O3(2000H2O)	106.4410		-81.06				
119	NA1CL1O3(5000H2O)	106.4410		-81.06				
120	NA1CL1O3(10000H2O)	106.4410		-81.07				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
121	NA1CL103(20000H20)	106.4410		-81.08				
122	NA1CL103(100000H20)	106.4410		-81.09				
123	NA1CL103(00H20)	106.4410		-81.1				
124	NA1CL104(C)	122.4404		-91.617				
125	NA1CL104(A)	122.4404		-88.30	-64.65		57.6	
126	NA1CL104(3.25H20)	122.4404		-90.48				
127	NA1CL104(3.5H20)	122.4404		-90.46				
128	NA1CL104(4H20)	122.4404		-90.41				
129	NA1CL104(4.5H20)	122.4404		-90.36				
130	NA1CL104(5H20)	122.4404		-90.31				
131	NA1CL104(6H20)	122.4404		-90.19				
132	NA1CL104(8H20)	122.4404		-89.98				
133	NA1CL104(10H20)	122.4404		-89.81				
134	NA1CL104(12H20)	122.4404		-89.66				
135	NA1CL104(15H20)	122.4404		-89.48				
136	NA1CL104(20H20)	122.4404		-89.24				
137	NA1CL104(25H20)	122.4404		-89.09				
138	NA1CL104(30H20)	122.4404		-88.97				
139	NA1CL104(40H20)	122.4404		-88.81				
140	NA1CL104(50H20)	122.4404		-88.70				
141	NA1CL104(75H20)	122.4404		-88.55				
142	NA1CL104(100H20)	122.4404		-88.47				
143	NA1CL104(150H20)	122.4404		-88.38				
144	NA1CL104(200H20)	122.4404		-88.34				
145	NA1CL104(300H20)	122.4404		-88.30				
146	NA1CL104(500H20)	122.4404		-88.27				
147	NA1CL104(1000H20)	122.4404		-88.26				
148	NA1CL104(1500H20)	122.4404		-88.25				
149	NA1CL104(2000H20)	122.4404		-88.26				
150	NA1CL104(10000H20)	122.4404		-88.27				
151	NA1CL104(20000H20)	122.4404		-88.28				
152	NA1CL104(100000H20)	122.4404		-88.29				
153	NA1CL104(00H20)	122.4404		-88.3				
154	NA1CL104:H20(C)	140.4558		-161.995				
155	NA1BR(C)	102.8988		-86.296				
156	NA1BR(A)	102.8988		-86.44	-87.44		33.8	-22.8
157	NA1BR(6.5H20)	102.8988		-87.178				
158	NA1BR(8H20)	102.8988		-87.165				
159	NA1BR(10H20)	102.8988		-87.099				
160	NA1BR(12H20)	102.8988		-87.026				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP 298
161	NA1BR(15H2O)	102.8988		-86.929				
162	NA1BR(20H2O)	102.8988		-86.808				
163	NA1BR(25H2O)	102.8988		-86.722				
164	NA1BR(30H2O)	102.8988		-86.659				
165	NA1BR(40H2O)	102.8988		-86.574				
166	NA1BR(50H2O)	102.8988		-86.521				
167	NA1BR(75H2O)	102.8988		-86.450				
168	NA1BR(100H2O)	102.8988		-86.417				
169	NA1BR(150H2O)	102.8988		-86.386				
170	NA1BR(200H2O)	102.8988		-86.374				
171	NA1BR(300H2O)	102.8988		-86.366				
172	NA1BR(500H2O)	102.8988		-86.365				
173	NA1BR(800H2O)	102.8988		-86.369				
174	NA1BR(1000H2O)	102.8988		-86.372				
175	NA1BR(1500H2O)	102.8988		-86.380				
176	NA1BR(2000H2O)	102.8988		-86.384				
177	NA1BR(3000H2O)	102.8988		-86.391				
178	NA1BR(5000H2O)	102.8988		-86.400				
179	NA1BR(7000H2O)	102.8988		-86.405				
180	NA1BR(10000H2O)	102.8988		-86.410				
181	NA1BR(20000H2O)	102.8988		-86.419				
182	NA1BR(50000H2O)	102.8988		-86.426				
183	NA1BR(100000H2O)	102.8988		-86.429				
184	NA1BR(00H2O)	102.8988		-86.44				
185	NA1BR:2H2O(C)	138.9296		-227.524				
186	NA1BR3(A)	262.7168		-88.56	-88.18		65.6	
187	NA1BR5(A)	422.5348		-91.4	-87.4		89.8	
188	NA1BR10(A)	118.8982		-79.9	-70.6		24.	
189	NA1BR103(C)	150.8970		-83.83				
190	NA1BR103(A)	150.8970		-77.4	-62.2		53.1	
191	NA1BR103(50H2O)	150.8970		-77.788				
192	NA1BR103(75H2O)	150.8970		-77.647				
193	NA1BR103(100H2O)	150.8970		-77.570				
194	NA1BR103(150H2O)	150.8970		-77.488				
195	NA1BR103(200H2O)	150.8970		-77.446				
196	NA1BR103(300H2O)	150.8970		-77.406				
197	NA1BR103(500H2O)	150.8970		-77.378				
198	NA1BR103(800H2O)	150.8970		-77.366				
199	NA1BR103(1000H2O)	150.8970		-77.364				
200	NA1BR103(1500H2O)	150.8970		-77.361				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA	WT	DH0	DH298	DG298	H298 - H0	S298	CP298
201	NA1BR1O3(2000H2O)	150.8970		-77.360				
202	NA1BR1O3(3000H2O)	150.8970		-77.362				
203	NA1BR1O3(5000H2O)	150.8970		-77.367				
204	NA1BR1O3(7000H2O)	150.8970		-77.370				
205	NA1BR1O3(10000H2O)	150.8970		-77.374				
206	NA1BR1O3(20000H2O)	150.8970		-77.380				
207	NA1BR1O3(50000H2O)	150.8970		-77.386				
208	NA1BR1O3(100000H2O)	150.8970		-77.390				
209	NA1BR1O3(00H2O)	150.8970		-77.4				
210	NA1BR2CL(A)	218.2608		-98.1	-93.3		59.2	
211	NA1I(C)	149.8942		-68.780				
212	NA1I(A)	149.8942		-70.58	-74.92		40.7	-22.9
213	NA1I(4.5H2O)	149.8942		-71.385				
214	NA1I(5H2O)	149.8942		-71.471				
215	NA1I(6H2O)	149.8942		-71.539				
216	NA1I(6.5H2O)	149.8942		-71.544				
217	NA1I(8H2O)	149.8942		-71.504				
218	NA1I(10H2O)	149.8942		-71.408				
219	NA1I(12H2O)	149.8942		-71.314				
220	NA1I(15H2O)	149.8942		-71.193				
221	NA1I(20H2O)	149.8942		-71.042				
222	NA1I(25H2O)	149.8942		-70.938				
223	NA1I(30H2O)	149.8942		-70.863				
224	NA1I(40H2O)	149.8942		-70.764				
225	NA1I(50H2O)	149.8942		-70.702				
226	NA1I(75H2O)	149.8942		-70.619				
227	NA1I(100H2O)	149.8942		-70.579				
228	NA1I(150H2O)	149.8942		-70.541				
229	NA1I(200H2O)	149.8942		-70.525				
230	NA1I(300H2O)	149.8942		-70.512				
231	NA1I(500H2O)	149.8942		-70.508				
232	NA1I(800H2O)	149.8942		-70.511				
233	NA1I(1000H2O)	149.8942		-70.514				
234	NA1I(1500H2O)	149.8942		-70.522				
235	NA1I(2000H2O)	149.8942		-70.526				
236	NA1I(3000H2O)	149.8942		-70.532				
237	NA1I(4000H2O)	149.8942		-70.537				
238	NA1I(5000H2O)	149.8942		-70.541				
239	NA1I(7000H2O)	149.8942		-70.546				
240	NA1I(10000H2O)	149.8942		-70.550				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
241 NA1I(20000H2O)	149.8942		-70.559				
242 NA1I(50000H2O)	149.8942		-70.566				
243 NA1I(100000H2O)	149.8942		-70.569				
244 NA1I(00H2O)	149.8942		-70.58				
245 NA1I:2H2O(C)	185.9250		-211.065				
246 NA1I3(A)	403.7030		-69.7	-74.9		71.3	
247 NA1I1O(A)	165.8936		-83.1	-71.8		12.8	
248 NA1I1O3(C)	197.8924		-115.150				
249 NA1I1O3(A)	197.8924		-110.3	-93.2		42.4	
250 NA1I1O3(500H2O)	197.8924		-110.37				
251 NA1I1O3(1000H2O)	197.8924		-110.31				
252 NA1I1O3(2000H2O)	197.8924		-110.29				
253 NA1I1O3(5000H2O)	197.8924		-110.28				
254 NA1I1O3(100000H2O)	197.8924		-110.29				
255 NA1I1O3(00H2O)	197.8924		-110.3				
256 NA1I1O4(C)	213.8918		-101.6				
257 NA1I1O4(AU) FROM NA+, IO4-(AU)	213.8918		-92.6				
258 NA2I2O(A)	315.7878			-144.9			
259 NA1H4I1O6(AU) FROM NA+,H4IO6- (AU)	249.9226		-237.8				
260 NA1I2O1H(A)	293.8060			-117.6			
261 NA2H3I1O6(AU) FROM 2NA+,H3IO6-2(AU)	271.9044		-294.4				
262 NA1I1CL2(A)	220.8002			-101.1			
263 NA1I2CL(A)	312.2516		-90.3	-90.4		67.0	
264 NA1I1BR2(A)	309.7122			-92.0			
265 NA1BR1I2(A)	356.7076		-88.0	-88.9		61.3	
266 NA1I1BR1CL(A)	265.2562			-97.6			
267 NA2S(C)	78.0436		-90.3	-86.4		19.	
268 NA2S(A)	78.0436		-106.9	-104.7		24.7	
269 NA2S(50H2O)	78.0436		-106.38				
270 NA2S(100H2O)	78.0436		-106.30				
271 NA2S(200H2O)	78.0436		-106.21				
272 NA2S(300H2O)	78.0436		-106.15				
273 NA2S(400H2O)	78.0436		-106.09				
274 NA2S(500H2O)	78.0436		-106.06				
275 NA2S(1000H2O)	78.0436		-105.94				
276 NA2S(5000H2O)	78.0436		-105.91				
277 NA2S2(A)	110.1076		-107.6	-106.2		35.0	
278 NA2S3(A)	142.1716		-108.6	-107.6		44.0	
279 NA2S4(A)	174.2356		-109.3	-108.7		52.9	
280 NA2S5(A)	206.2996		-109.7	-109.5		61.8	

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
281 NA2S103(A)	126.0418		-266.7	-241.5		21.	
282 NA2S104(C)	142.0412		-331.52	-303.39		35.73	30.42
283 NA2S104(A)	142.0412		-332.10	-303.16		33.0	-48.
284 NA2S104(28.37H2O)	142.0412		-333.491				
285 NA2S104(30H2O)	142.0412		-333.432				
286 NA2S104(40H2O)	142.0412		-333.165				
287 NA2S104(50H2O)	142.0412		-332.988				
288 NA2S104(60H2O)	142.0412		-332.840				
289 NA2S104(80H2O)	142.0412		-332.605				
290 NA2S104(100H2O)	142.0412		-332.420				
291 NA2S104(120H2O)	142.0412		-332.275				
292 NA2S104(140H2O)	142.0412		-332.184				
293 NA2S104(160H2O)	142.0412		-332.122				
294 NA2S104(180H2O)	142.0412		-332.076				
295 NA2S104(200H2O)	142.0412		-332.04				
296 NA2S104(250H2O)	142.0412		-331.980				
297 NA2S104(300H2O)	142.0412		-331.943				
298 NA2S104(350H2O)	142.0412		-331.918				
299 NA2S104(400H2O)	142.0412		-331.901				
300 NA2S104(500H2O)	142.0412		-331.879				
301 NA2S104(600H2O)	142.0412		-331.867				
302 NA2S104(700H2O)	142.0412		-331.860				
303 NA2S104(800H2O)	142.0412		-331.857				
304 NA2S104(900H2O)	142.0412		-331.855				
305 NA2S104(1000H2O)	142.0412		-331.855				
306 NA2S104(2000H2O)	142.0412		-331.872				
307 NA2S104(3000H2O)	142.0412		-331.892				
308 NA2S104(4000H2O)	142.0412		-331.907				
309 NA2S104(5000H2O)	142.0412		-331.92				
310 NA2S104(10000H2O)	142.0412		-331.958				
311 NA2S104(20000H2O)	142.0412		-331.992				
312 NA2S104(50000H2O)	142.0412		-332.027				
313 NA2S104(100000H2O)	142.0412		-332.047				
314 NA2S104(00H2O)	142.0412		-332.10				
315 NA2S203(AU) FROM 2NA+, S2O3-2(AU)	158.1058		-270.7				
316 NA2S204(A)	174.1052		-294.9	-268.7		50.	
317 NA2S206(AU) FROM 2NA+, S2O6-2(AU)	206.1040		-401.2				
318 NA2S207(AU) FROM 2NA+, S2O7-2(AU)	222.1034		-449.7				
319 NA2S208(A)	238.1028		-434.8	-390.6		87.5	
320 NA2S306(AU) FROM 2NA+, S3O6-2(AU)	238.1680		-401.5				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
321 NA2S4O6(AU)	270.2320		-407.3€				
FROM 2NA+, S4O6-2(AU)							
322 NA2S5O6(AU)	302.2960		-410.3				
FROM 2NA+, S5O6-2(AU)							
323 NA1H1S(A)	56.0618		-61.6	-59.71		29.1	
FROM NA+,HS-							
324 NA1H1S1O3(A)	104.0600		-207.06	-188.74		47.5	
FROM NA+,HSO3-							
325 NA1H1S1O4(A)	120.0594		-269.47	-243.28		45.6	-9.
FROM NA+,HSO4-							
326 NA1H1S1O4(1.10H2O)	120.0594		-270.16				
327 NA1H1S2O4(A)	152.1234			-209.5			
FROM NA+,HS2O4-							
328 NA1S1O3F(AU)	122.0504		-250.4				
FROM NA+, SO3F-(AU)							
329 NA2SE(A)	124.9396			-94.3			
330 NA2SE1O3(C)	172.9378		-229.43				
331 NA2SE1O3(A)	172.9378		-236.5	-213.6		31.	
332 NA2SE1O4(A)	188.9372		-258.0	-230.7		41.1	
333 NA1H1SE(A)	102.9578		-53.6	-52.1		33.	
FROM NA+,HSE-							
334 NA1H1SE1O3(A)	150.9560		-180.37	-160.95		46.4	
FROM NA+,HSEO3-							
335 NA1H1SE1O4(A)	166.9554		-196.4	-170.7		49.8	
FROM NA+,HSEO4-							
336 NA2TE1O3(AU)	221.5778		-257.4				
FROM 2NA+, TEO3-2(AU)							
337 NA1H5TE1O6(AU)	251.6262		-358.9				
FROM NA+,H5TEO6-(AU)							
338 NA2H4TE1O6(AU)	273.6080		-406.9				
FROM 2NA+,H4TEO6-2(AU)							
339 NA2P01CL6(A)	468.6976			-263.			
340 NA1N3(A)	65.0099		8.37	20.6		39.9	
341 NA1N1O2(C)	68.9953		-85.720				
342 NA1N1O2(A)	68.9953		-82.4	-71.5		47.6	-12.2
343 NA1N1O2(4.5H2O)	68.9953		-83.21				
344 NA1N1O2(5H2O)	68.9953		-83.19				
345 NA1N1O2(6H2O)	68.9953		-83.14				
346 NA1N1O2(8H2O)	68.9953		-83.08				
347 NA1N1O2(10H2O)	68.9953		-83.03				
348 NA1N1O2(12H2O)	68.9953		-82.99				
349 NA1N1O2(15H2O)	68.9953		-82.95				
350 NA1N1O2(20H2O)	68.9953		-82.89				
351 NA1N1O2(25H2O)	68.9953		-82.85				
352 NA1N1O2(30H2O)	68.9953		-82.82				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP 298
353 NA1N102(40H20)	68.9953		-82.78				
354 NA1N102(50H20)	68.9953		-82.73				
355 NA1N102(75H20)	68.9953		-82.65				
356 NA1N102(100H20)	68.9953		-82.59				
357 NA1N102(150H20)	68.9953		-82.50				
358 NA1N102(200H20)	68.9953		-82.44				
359 NA1N102(300H20)	68.9953		-82.36				
360 NA1N102(00H20)	68.9953		-82.4				
361 NA1N103(C)	84.9947		-111.82	-87.73		27.85	22.24
362 NA1N103(A)	84.9947		-106.95	-89.20		49.1	-9.6
363 NA101N1C2(AU2) SCDIUM PEROXYNITRITE; FROM NA+, ONO2-(AU)	84.9947		-68.6				
364 NA1N103(6H20)	84.9947		-108.658				
365 NA1N103(8H20)	84.9947		-108.523				
366 NA1N103(10H20)	84.9947		-108.381				
367 NA1N103(12H20)	84.9947		-108.253				
368 NA1N103(15H20)	84.9947		-108.094				
369 NA1N103(20H20)	84.9947		-107.889				
370 NA1N103(25H20)	84.9947		-107.741				
371 NA1N103(30H20)	84.9947		-107.628				
372 NA1N103(40H20)	84.9947		-107.469				
373 NA1N103(50H20)	84.9947		-107.362				
374 NA1N103(75H20)	84.9947		-107.205				
375 NA1N103(100H20)	84.9947		-107.123				
376 NA1N103(150H20)	84.9947		-107.036				
377 NA1N103(200H20)	84.9947		-106.993				
378 NA1N103(300H20)	84.9947		-106.952				
379 NA1N103(400H20)	84.9947		-106.932				
380 NA1N103(500H20)	84.9947		-106.921				
381 NA1N103(600H20)	84.9947		-106.915				
382 NA1N103(700H20)	84.9947		-106.911				
383 NA1N103(800H20)	84.9947		-106.909				
384 NA1N103(1000H20)	84.9947		-106.906				
385 NA1N103(3000H20)	84.9947		-106.910				
386 NA1N103(5000H20)	84.9947		-106.915				
387 NA1N103(7000H20)	84.9947		-106.918				
388 NA1N103(10000H20)	84.9947		-106.922				
389 NA1N103(20000H20)	84.9947		-106.928				
390 NA1N103(50000H20)	84.9947		-106.935				
391 NA1N103(100000H20)	84.9947		-106.939				
392 NA1N103(00H20)	84.9947		-106.95				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
393 NA2N2O2(AU)	105.9918		-118.9				
SODIUM HYPONITRITE							
394 NA1H1N2O2(AU)	84.0100		-69.8				
SODIUM HYPONITRITE: FROM NA+,HN2O2-(AU)							
395 NA1P1O3(AU)	101.9618		-290.9				
SODIUM METAPHOSPHATE							
396 NA3P1O4(A)	163.9408		-477.5	-431.3		-11.	
397 NA3P1O4(1000H2O)	163.9408		-473.6				
398 NA4P2O7(A)	265.9026		-772.4	-709.1		28.	
399 NA4P2O7(2000H2O)	265.9026		-770.5				
400 NA1H2P1O2(AU)	87.9784		-204.1				
FROM NA+, H2PO2-(AU)							
401 NA1H2P1O3(AU)	103.9778		-289.1				
FROM NA+, H2PO3-(AU)							
402 NA1H2P1O3(600H2O)	103.9778		-289.1				
403 NA1H2P1O4(A)	119.9772		-367.21	-332.76		35.7	
FROM NA+, H2PO4-							
404 NA1H2P1O4(400H2O)	119.9772		-366.82				
405 NA1H3P2O7(A)	199.9572		-601.5	-546.2		65.	
FROM NA+, H3P2O7-							
406 NA1H3P2O7(1200H2O)	199.9572		-601.5				
407 NA2H1P1O3(AU)	125.9596		-346.4				
FROM 2NA+, HPO3-2(AU)							
408 NA2H1P1O3(800H2O)	125.9596		-346.3				
409 NA2H1P1O4(A)	141.9590		-423.61	-385.53		20.2	
FROM 2NA+, HPO4-2							
410 NA2H1P1O4(600H2O)	141.9590		-422.96				
411 NA2H2P2O7(A)	221.9390		-659.4	-605.7		67.	
FROM 2NA+, H2P2O7-2							
412 NA2H2P2O7(1200H2O)	221.9390		-659.4				
413 NA3H1P2O7(A)	243.9208		-715.9	-659.2		53.	
FROM 3NA+, HP2O7-3							
414 NA3H1P2O7(1200H2O)	243.9208		-715.9				
415 NA2P1O3F(A)	143.9500			-406.0			
416 NA1H1P1O3F(A)	121.9682			-349.0			
FROM NA+, HPO3F-							
417 NA1AS1O2(A)	129.9102		-159.93	-146.25		23.8	
418 NA3AS1O4(A)	207.8886		-384.44	-342.78		3.4	
419 NA1H2AS1O3(A)	147.9256		-228.23	-202.94		40.5	
420 NA1H2AS1O3(400H2O)	147.9256		-228.0				
421 NA1H2AS1O4(A)	163.9250		-274.78	-242.63		42.	
422 NA1H2AS1O4(300H2O)	163.9250		-274.8				
423 NA2H1AS1O4(A)	185.9068		-331.40	-296.01		27.8	
424 NA2H1AS1O4(400H2O)	185.9068		-331.2				
425 NA2AS1O3F(A)	187.8978			-370.78			

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
426	NA1H1AS103F(A)	165.9160			-316.19			
	FROM NA+, HASO3F-							
427	NA1SB102(A)	176.7386			-143.91			
428	NA2SB2S4(A)	417.7356		-167.2	-149.0		15.7	
429	NA2SB2S4(400H2O)	417.7356		-167.2				
430	NA1BI1CL4(A)	373.7818			-177.7			
431	NA3BI1CL6(A)	490.6674			-366.29			
432	NA1BI1BR4(A)	551.6058			-152.8			
433	NA2BI1I4(A)	762.5772			-112.5			
434	NA2N1H4BI1CL6(A)	485.7163			-322.8			
435	NA2C2(C)	70.0020		4.1				
	SODIUM CARBIDE							
436	NA2C103(C)	105.9890		-270.4	-250.5		32.5	26.41
437	NA2C103(A)	105.9890		-276.62	-251.36		14.6	
438	NA2C103(15H2O)	105.9890		-278.27				
439	NA2C103(20H2O)	105.9890		-278.13				
440	NA2C103(25H2O)	105.9890		-277.95				
441	NA2C103(30H2O)	105.9890		-277.78				
442	NA2C103(40H2O)	105.9890		-277.50				
443	NA2C103(50H2O)	105.9890		-277.30				
444	NA2C103(75H2O)	105.9890		-276.96				
445	NA2C103(100H2O)	105.9890		-276.76				
446	NA2C103(150H2O)	105.9890		-276.52				
447	NA2C103(200H2O)	105.9890		-276.38				
448	NA2C103(300H2O)	105.9890		-276.23				
449	NA2C103(400H2O)	105.9890		-276.15				
450	NA2C103(500H2O)	105.9890		-276.10				
451	NA2C103(600H2O)	105.9890		-276.07				
452	NA2C103(800H2O)	105.9890		-276.03				
453	NA2C103(1000H2O)	105.9890		-276.0				
454	NA2C103(2000H2O)	105.9890		-275.95				
455	NA2C103:H2O(C)	124.0044		-341.9	-308.0		41.4	
456	NA2C103:7H2O(C)	232.0968		-765.1	-648.4		97.8	
457	NA2C103:10H2O(C)	286.1430		-976.0	-818.9		129.6	
458	NA2C204(C)	133.9996		-315.0				34.
	SODIUM OXALATE							
459	NA2C204(A)	133.9996		-312.0	-286.3		39.1	
460	NA2C204(1000H2O)	133.9996		-311.65				
461	NA1H1C2(C)	48.0202		24.7				
	SODIUM ACETYLIDE							
462	NA1C1H102(C)	68.0078	-158.02	-159.13	-143.19	3.767	24.80	19.76
	SODIUM FORMATE							
463	NA1C1H102(A)	68.0078		-159.10	-146.5		36.	-9.9
464	NA1C1H1C2(400H2O)	68.0078		-158.97				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
465	NA1C1H1O2:2H2O(C)	104.0386		-300.7	-257.4		44.4	
466	NA1C1H1O2:3H2O(C)	122.0540		-368.4				
467	NA1H1C1O3(C)	84.0072		-226.5	-203.2		24.4	20.94
468	NA1H1C1O3(A)	84.0072		-222.78	-202.85		35.9	
	FROM NA+, HCO3-							
469	NA1H1C1O3(AU)	84.0072		-222.5				
470	NA1O1C1H3(C)	54.0244				3.374	26.43	16.60
	SODIUM METHYLATE							
471	NA1O1C1H3(A)	54.0244		-103.63	-79.55		4.2	
472	NA1O1C1H3(6OC1H3O1H)	54.0244		-105.2				
473	NA1H1C2O4(C)	112.0178		-258.6				
	SODIUM BIOXALATE							
474	NA1H1C2O4(A)	112.0178		-253.0	-229.52		49.8	
	FROM NA+, HC2O4-							
475	NA1H1C2O4(400H2O)	112.0178		-253.3				
476	NA1H1C2O4:H2O(C)	130.0332		-330.8				
477	NA1C2H3O2(C)	82.0350		-169.41	-145.14		29.4	19.3
	SODIUM ACETATE							
478	NA1C2H3O2(A)	82.0350		-173.55	-150.88		34.8	9.6
479	NA1C2H3O2(3H2O)	82.0350		-170.320				
480	NA1C2H3O2(3.5H2O)	82.0350		-170.790				
481	NA1C2H3O2(4H2O)	82.0350		-171.140				
482	NA1C2H3O2(4.5H2O)	82.0350		-171.430				
483	NA1C2H3C2(5H2O)	82.0350		-171.660				
484	NA1C2H3O2(5.5H2O)	82.0350		-171.858				
485	NA1C2H3O2(6H2O)	82.0350		-172.020				
486	NA1C2H3O2(7H2O)	82.0350		-172.270				
487	NA1C2H3O2(8H2O)	82.0350		-172.450				
488	NA1C2H3C2(9H2O)	82.0350		-172.584				
489	NA1C2H3O2(10H2O)	82.0350		-172.680				
490	NA1C2H3C2(12H2O)	82.0350		-172.800				
491	NA1C2H3O2(15H2O)	82.0350		-172.905				
492	NA1C2H3O2(20H2O)	82.0350		-172.994				
493	NA1C2H3O2(25H2O)	82.0350		-173.056				
494	NA1C2H3C2(30H2O)	82.0350		-173.091				
495	NA1C2H3O2(40H2O)	82.0350		-173.143				
496	NA1C2H3C2(50H2O)	82.0350		-173.178				
497	NA1C2H3C2(75H2O)	82.0350		-173.232				
498	NA1C2H3O2(100H2O)	82.0350		-173.264				
499	NA1C2H3O2(150H2O)	82.0350		-173.307				
500	NA1C2H3O2(200H2O)	82.0350		-173.335				
501	NA1C2H3C2(300H2O)	82.0350		-173.370				
502	NA1C2H3O2(400H2O)	82.0350		-173.391				
503	NA1C2H3O2(500H2O)	82.0350		-173.407				

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	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
504 NA1C2H3O2(600H2O)	82.0350		-173.418				
505 NA1C2H3O2(700H2O)	82.0350		-173.426				
506 NA1C2H3O2(800H2O)	82.0350		-173.434				
507 NA1C2H3O2(900H2O)	82.0350		-173.441				
508 NA1C2H3O2(1000H2O)	82.0350		-173.446				
509 NA1C2H3O2(1500H2O)	82.0350		-173.464				
510 NA1C2H3O2(2000H2O)	82.0350		-173.475				
511 NA1C2H3O2(3000H2O)	82.0350		-173.488				
512 NA1C2H3O2(4000H2O)	82.0350		-173.496				
513 NA1C2H3O2(5000H2O)	82.0350		-173.502				
514 NA1C2H3O2(7000H2O)	82.0350		-173.509				
515 NA1C2H3O2(10000H2O)	82.0350		-173.515				
516 NA1C2H3O2(20000H2O)	82.0350		-173.525				
517 NA1C2H3O2(50000H2O)	82.0350		-173.534				
518 NA1C2H3O2(100000H2O)	82.0350		-173.538				
519 NA1C2H3O2(00H2O)	82.0350		-173.55				
520 NA1C2H3O2:3H2O(C)	136.0812		-383.19	-318.57		61.2	
521 NA1C2H3O2(1100C2H5O1H)	82.0350		-170.8				
522 C1H2O1H1C1O1C1NA(C) SODIUM HYDROXYACETATE	98.0344		-215.3				
523 C1H2O1H1C1O1C1NA(A)	98.0344		-213.3				
524 C1H2O1H1C1O1O1NA(10H2O)	98.0344		-213.57				
525 C1H2O1H1C1O1O1NA(15H2O)	98.0344		-213.46				
526 C1H2O1H1C1O1O1NA(20H2O)	98.0344		-213.38				
527 C1H2O1H1C1O1O1NA(25H2O)	98.0344		-213.32				
528 C1H2O1H1C1O1O1NA(30H2O)	98.0344		-213.27				
529 C1H2O1H1C1O1O1NA(40H2O)	98.0344		-213.17				
530 C1H2O1H1C1O1O1NA(50H2O)	98.0344		-213.10				
531 C1H2O1H1C1O1O1NA(100H2O)	98.0344		-212.99				
532 C1H2O1H1C1O1O1NA(200H2O)	98.0344		-213.0				
533 C1H2O1H1C1O1O1NA:1/2H2O(C)	107.0421		-250.7				
534 C1H(O1H)2C1O1C1NA(C) SODIUM DIHYDROXYACETATE	114.0338		-258.6				
535 C1H(O1H)2C1O1O1NA(200H2O)	114.0338		-253.9				
536 NA1O1C2H5(A)	68.0516		-87.1				
537 NA1O1C2H5(60C2H5O1H) SODIUM ETHYLATE	68.0516		-111.3				
538 NA1C2H5O2(C) SODIUM ETHYLENE GLYCOLATE	84.0510		-148.4				
539 NA1C2H6O2:C1H3O1H(C) SODIUM ETHYLENE GLYCOLATE:METHANOL	116.0936		-211.5				
540 C1H2O1H1C1O1O1NA:C1H2O1H1C1O1O1H(C) SODIUM ACID HYDROXYACETATE	174.0870		-377.0				

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	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
541 NA1C2H5O2:C2H5O1H(C)	130.1208		-220.1				
SODIUM ETHYLENE GLYCOLATE:ETHANOL							
542 NA1C2H5O2:C2H6O2(C)	146.1202		-264.7				
SODIUM ETHYLENE GLYCOLATE:GLYCOL							
543 C1H2O1NA1C1O1O1NA(C)	120.0162		-247.9				
DISODIUM HYDROXYACETATE							
544 NA1C1C1H2C1O2NA(300H2O)	120.0162		-257.1				
DISODIUM HYDROXYACETATE							
545 NA1C1C1H2C1O2NA:2H2O(C)	156.0470		-394.2				
DISODIUM HYDROXYACETATE DIHYDRATE							
546 NA1H1C1O3:NA2C1O3:2H2O(C)	226.0270		-641.17				
547 3NA1H1C1O3:NA2C1O3(C)	358.0106		-951.9				
548 NA1C2CL3O2(C)	185.3700		-178.9				
SODIUM TRICHLOROACETATE							
549 NA1C2CL3O2(A)	185.3700		-180.8				
550 C1CL3C1O1O1NA(400H2O)	185.3700		-180.77				
551 NA1C2CL1H2O2(A)	116.4800		-177.20				
SODIUM CHLOROACETATE							
552 NA1C2CL2H1O2(A)	150.9250		-179.8				
SODIUM DICHLOROACETATE							
553 NA1C2CL2H1O2(400H2O)	150.9250		-177.14				
554 C1H1CL2C1O1O1NA(400H2O)	150.9250		-179.8				
555 NA1I:3C1H3O1H(C)	246.0220		-248.6				
556 NA1C2H5S1O4(600H2O)	148.1138		-266.2				
SODIUM ETHYLSULFATE							
557 (C1H1O)2:2NA1H1S1O3(800H2O)	266.1572		-512.1				
GLYOXAL SODIUM BISULFITE							
558 (C1H1O)2:2NA1H1S1O3:H2O(C)	284.1726		-589.8				
559 NA1C1N(C)	49.0077		-20.99				16.4
(C,I,CUBIC)							
560 NA1C1N(C2)	49.0077		-21.69				
(C,II,ORTHORHOMBIC)							
561 NA1C1N(A)	49.0077		-21.4	-21.4		36.6	
562 NA1C1N(200H2O)	49.0077		-21.0				
563 NA1C1N:1/2H2O(C)	58.0154		-56.35				
564 NA1C1N:2H2O(C)	85.0385		-162.47				
565 NA1C1N1C(C)	65.0071		-96.89	-85.6		23.1	20.7
566 NA1C1N1O(A)	65.0071		-92.3	-85.9		39.6	
567 NA1N1H1C1N(AU)	64.0224		-29.2				
SODIUM CYANAMIDE							
568 N1H2C1O1O1NA(C)	83.0225		-213.7				
SODIUM CARBAMATE							
569 NA1C1N1H2O2(AU)	83.0225		-77.7				
SODIUM SALT OF NITROMETHANE							
570 N1H2C1H2C1O1O1NA(A)	97.0497		-169.67	-137.871		42.6	
SODIUM SALT OF GLYCINE							

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
571	NA1C2N1H402(AU2)	97.0497						
	SODIUM SALT OF NITROETHANE							
572	N1H2C1H2C1O1O1NA(2OOH2O)	97.0497		-169.7				
573	NA1C1N1I2(A)	302.8165			-30.06			
574	NA1(C1N1)2I(A)	201.9300		23.02				
575	NA1C1N1S(C)	81.0717		-40.75				
576	NA1C1N1S(A)	81.0717		-39.12	-40.44		48.6	1.5
577	NA1C1N1S(4H2O)	81.0717		-40.264				
578	NA1C1N1S(4.5H2O)	81.0717		-40.295				
579	NA1C1N1S(5H2O)	81.0717		-40.317				
580	NA1C1N1S(6H2O)	81.0717		-40.313				
581	NA1C1N1S(7H2O)	81.0717		-40.269				
582	NA1C1N1S(8H2O)	81.0717		-40.212				
583	NA1C1N1S(9H2O)	81.0717		-40.149				
584	NA1C1N1S(10H2O)	81.0717		-40.086				
585	NA1C1N1S(12H2O)	81.0717		-39.972				
586	NA1C1N1S(15H2O)	81.0717		-39.838				
587	NA1C1N1S(20H2O)	81.0717		-39.684				
588	NA1C1N1S(25H2O)	81.0717		-39.580				
589	NA1C1N1S(30H2O)	81.0717		-39.504				
590	NA1C1N1S(40H2O)	81.0717		-39.397				
591	NA1C1N1S(50H2O)	81.0717		-39.328				
592	NA1C1N1S(75H2O)	81.0717		-39.227				
593	NA1C1N1S(100H2O)	81.0717		-39.175				
594	NA1C1N1S(150H2O)	81.0717		-39.123				
595	NA1C1N1S(200H2O)	81.0717		-39.099				
596	NA1C1N1S(300H2O)	81.0717		-39.077				
597	NA1C1N1S(400H2O)	81.0717		-39.070				
598	NA1C1N1S(500H2O)	81.0717		-39.065				
599	NA1C1N1S(800H2O)	81.0717		-39.060				
600	NA1C1N1S(1000H2O)	81.0717		-39.062				
601	NA1C1N1S(2000H2O)	81.0717		-39.069				
602	NA1C1N1S(3000H2O)	81.0717		-39.074				
603	NA1C1N1S(4000H2O)	81.0717		-39.079				
604	NA1C1N1S(5000H2O)	81.0717		-39.082				
605	NA1C1N1S(7000H2O)	81.0717		-39.087				
606	NA1C1N1S(10000H2O)	81.0717		-39.091				
607	NA1C1N1S(20000H2O)	81.0717		-39.098				
608	NA1C1N1S(50000H2O)	81.0717		-39.106				
609	NA1C1N1S(100000H2O)	81.0717		-39.109				
610	NA1C1N1S(OOH2O)	81.0717		-39.12				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
611 NA1C1N1S(9C2H5O1H)	81.0717		-39.82				
612 NA1C1N1S(10C2H5O1H)	81.0717		-39.90				
613 NA1C1N1S(12C2H5O1H)	81.0717		-40.15				
614 NA1C1N1S(15C2H5O1H)	81.0717		-40.55				
615 NA1C1N1S(20C2H5O1H)	81.0717		-41.05				
616 NA1C1N1S(25C2H5O1H)	81.0717		-41.25				
617 NA1C1N1S(30C2H5O1H)	81.0717		-41.37				
618 NA1C1N1S(50C2H5O1H)	81.0717		-41.63				
619 NA1C1N1S(100C2H5O1H)	81.0717		-41.79				
620 NA1C1N1S(200C2H5O1H)	81.0717		-41.87				
621 NA1C1N1S:2S1O2(C)	209.1973		-203.4				
622 N1H2C1S1S1NA(A)	115.1517		-49.9				
SODIUM DITHIOCARBAMATE; FROM NA+, CNS2H2-							
623 N1H1C(S2NA2)(A)	137.1335		-97.4				
DISODIUM DITHIOIMINOCARBONATE; FROM 2NA+, NHCS2-2							
624 NA1H1SI(O1H)6(A)	154.1282		-477.2				
625 NA2SI1F6(C)	188.0560		-695.4	-656.7		44.7	
626 NA2SI1F6(A)	188.0560		-685.8	-650.9		57.4	
627 NA2SI1F6(630H2O)	188.0560		-685.1				
628 NA1H1SI1F6(400H2O)	166.0742		-628.0				
629 NA1SN1CL3(A)	248.0388		-173.8	-165.4		76.	
630 NA2SN1CL6(AU)	377.3876		-346.7				
FROM 2NA+, SNCL6-2(AU)							
631 NA1SN1BR3(A)	381.4068		-147.0	-145.5		74.	
632 NA1H1PB1O2(A)	263.1866			-143.49			
FROM NA+, HPBO2-							
633 NA1PB1(O1H)3(A)	281.2020			-200.2			
634 NA1PB1CL3(A)	336.5388			-164.5			
635 NA1PB1BR3(A)	469.9068			-144.6			
636 NA1PB1I3(A)	610.8930			-110.1			
637 NA2PB1I4(A)	760.7872			-186.1			
638 NA2PB1P2O7(A)	427.1130			-605.0			
639 NA6PB1P2O7(AU)	519.0722			-1430.9			
640 NA6PB(P2O7)2(AU)	693.0156		-1430.9				
641 NA1B1O2(C)	65.7996	-233.18	-234.3	-220.9	2.780	17.57	15.76
642 NA1B1O2(A)	65.7996		-241.99	-224.86		5.2	
643 NA1B1O2(220H2O)	65.7996		-242.0				
644 NA1B1O3(AU)	81.7990		-220.4				
645 NA1B1O3:4H2O(C)	153.8606		-505.3				
646 NA2B4O7(C)	201.2194	-779.98	-784.2	-737.6	7.262	45.30	44.64
647 NA2B4O7(GL)	201.2194		-779.3			44.39	44.42
ENTROPY IS 44.39+X							

NBS ALKALI METAL CMPD. THERMC. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
648 NA2B4O7(A)	201.2194			-747.8			
649 NA2B4O7:4H2O(C)	273.2810		-1077.3				
650 NA2B4O7:5H2O(C)	291.2964		-1147.8				
651 NA2B4O7:10H2O(C)	381.3734		-1500.7				147.
652 NA2O:3B2O3(C)	270.8396		-1097.5				
653 NA2C:3B2O3(GL)	270.8396		-1089.1				
654 NA2C:4B2O3(C)	340.4598		-1408.2				
655 NA2O:4B2O3(GL)	340.4598		-1394.2				
656 NA1B1H4(C)	37.8328	-43.100	-45.08	-29.62	3.890	24.21	20.74
657 NA1B1H4(A)	37.8328		-45.88	-35.28		40.5	
658 NA1B1H4(350H2O)	37.8328		-45.789				
659 NA1B1H4:2H2O(C)	73.8636		-187.6	-144.58		43.	
660 NA1B(O1H)4(A)	101.8304		-378.62	-338.24		38.6	
661 NA1H2B1C3:H2O2(A)	117.8298			-315.4			
662 NA1H1B4O7(A)	179.2376			-704.4			
FROM NA+, HB4O7-							
663 NA1B1F4(A)	109.7944		-433.8	-418.0		58.	
664 NA1B1F2(O1H)2(A)	105.8124			-383.1			
665 NA1B1F3O1H(A)	107.8034		-422.4	-400.7		54.	
666 NA1AL1O2(C)	81.9701		-270.96	-255.72		16.9	17.52
667 NA1AL1O2(A)	81.9701		-277.0	-259.4		9.	
668 NA1AL1(O1H)4(A)	118.0009		-413.6	-372.8		42.	
669 NA3AL1F6(C)	209.9413		-789.0	-749.7		57.0	51.60
CRYOLITE							
670 NA3AL1F6(AU)	209.9413		-775.1				
671 NA1AL(S1O4)2(A)	242.0945		-619.	-535.		-53.2	
FROM NA+, 2SO4-2, AL+3							
672 NA3GA1O3(A)	186.6876			-336.			
673 NA1H2GA1O3(A)	142.7240			-241.			
674 NA2H1GA1O3(A)	164.7058			-289.			
FROM 2NA+, HGAO3-2							
675 NA1GA1BR4(A)	412.3458		-215.6	-194.1		22.7	
676 NA1TL1(C1N)4(A)	331.4314			105.			
677 NA2ZN1O2(A)	143.3484			-217.04			
678 NA1H1ZN1O2(A)	121.3666			-171.85			
FROM NA+, HZNO2-							
679 NA1ZN(O1H)3(A)	139.3820			-228.54			
680 NA2ZN(O1H)4(A)	179.3792			-330.42			
681 NA1ZN1CL3(A)	194.7188			-191.8			
682 NA2ZN1CL4(A)	253.1616			-284.8			
683 NA1ZN1BR3(A)	328.0868			-169.9			
684 NA1ZN1I3(A)	469.0730			-132.3			
685 NA2ZN1I4(A)	618.9672			-206.5			
686 NA2ZN1(C1N)4(A)	215.4212		-33.0	-18.4		82.	

NBS ALKALI METAL CMPD. THERMC. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
687 NA2ZN1(C1N1S)4(A)	343.6772			-73.5			
688 NA2CD1O2(A)	190.3784			-193.2			
689 NA1H1CD1O2(A)	168.3966			-149.5			
FROM NA+, HCDO2-							
690 NA1CD(O1H)3(A)	186.4120			-206.5			
691 NA2CD(O1H)4(A)	226.4092			-306.5			
692 NA1CD1CL3(A)	241.7488		-191.5	-179.0		62.6	
693 NA1CD1BR3(A)	375.1168			-160.0			
694 NA1CD1I3(A)	516.1030			-124.6			
695 NA2CD1I4(A)	665.9972		-196.5	-200.7		106.	
696 NA2CD(N3)4(A)	326.4600			164.2			
697 NA2CD1P2O7(A)	332.3230			-614.3			
698 NA1CD(C1N)3(A)	213.4435			22.2			
699 NA2CD(C1N)4(A)	262.4512		-12.5	-3.9		105.	
700 NA1CD(C1N1S)3(A)	309.6355			-17.3			
701 NA1HG1CL3(A)	329.9388		-150.3	-136.5		64.	
702 NA2HG1CL4(A)	388.3816		-247.2	-232.0		98.	
703 NA1HG1BR3(A)	463.3068		-127.5	-124.6		76.	
704 NA2HG1BR4(A)	566.2056		-217.8	-213.9		102.	
705 NA1HG1I3(A)	604.2930		-93.9	-98.1		86.	
706 NA2HG1I4(A)	754.1872		-171.0	-175.8		114.	
707 NA1HG(C1N)3(A)	301.6335		37.5	48.1		67.9	
708 NA2HG(C1N)4(A)	350.6412		11.0	22.6		101.1	
709 NA1HG(C1N1S)3(A)	397.8255			15.9			
710 NA2HG(C1N1S)4(A)	478.8972		-36.8	-26.9		137.	
711 NA2CU1O2(A)	141.5184			-169.1			
712 NA1H1CU1O2(A)	119.5366			-124.4			
713 NA1CU1CL2(A)	157.4358			-120.0			
714 NA2CU1CL3(A)	215.8786			-215.			
715 NA1CU(C1N)2(A)	138.5656			-1.0			
716 NA2CU(C1N)3(A)	187.5733			-28.7			
717 NA3CU(C1N)4(A)	236.5810			-52.4			
718 NA3CU(C1N1S)4(A)	364.8370		-93.7	-100.8		196.	
719 NA1AG1CL2(A)	201.7658		-116.0	-114.1		69.4	
720 NA1AG1BR2(A)	290.6778			-103.8			
721 NA2AG1BR3(A)	393.5766			-193.2			
722 NA1AG1I2(A)	384.6686			-83.4			
723 NA2AG1I3(A)	534.5628		-158.3	-162.0		88.7	
724 NA3AG1I4(A)	684.4570			-237.9			
725 NA1AG(C1N)2(A)	182.8956		7.2	10.4		60.	
726 NA1AG(S1C1N)2(A)	247.0236			-11.2			

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
727 NA2AG(S1C1N)3(A)	328.0953			-53.3			
728 NA3AG(S1C1N)4(A)	409.1670			-94.1			
729 NA1AU1CL4(A)	361.7688		-134.4	-118.81		77.9	
730 NA1AU1BR4(A)	539.5928		-103.2	-102.6			
731 NA1AU(C1N)2(A)	271.9926		0.5	5.7		55.	
732 NA1AU(S1C1N)2(A)	336.1206			-2.4			
733 NA1AU(S1C1N)4(A)	452.2844			71.6			
734 NA2NI(C1N)4(A)	208.7612		-26.9	-12.4		80.	
735 NA3(CC(N1O2)6)(C)	403.9356		-339.6				
736 NA3(CO(N1O2)6)(14000H2O)	403.9356		-322.2				
737 NA3CO(C1N)6(A)	284.0100					97.9	
738 NA(CC(N1H3)2(N1O2)2C2O4)(C)	296.0154		-358.6				
739 NA1FE(S1O4)2(A)	270.9600			-427.0			
740 NA3FE(C1N)6(A)	280.9238		-37.9	-13.5		106.9	
741 NA3FE(C1N)6(500H2O)	280.9238		-37.29				
742 NA3FE(C1N)6(800H2O)	280.9238		-37.25				
743 NA3FE(C1N)6(1000H2O)	280.9238		-37.30				
744 NA3FE(C1N)6(2000H2O)	280.9238		-37.33				
745 NA3FE(C1N)6(3000H2O)	280.9238		-37.38				
746 NA3FE(C1N)6(5000H2O)	280.9238		-37.45				
747 NA3FE(C1N)6(10000H2O)	280.9238		-37.54				
748 NA3FE(C1N)6(20000H2O)	280.9238		-37.61				
749 NA3FE(C1N)6(50000H2O)	280.9238		-37.69				
750 NA3FE(C1N)6(100000H2O)	280.9238		-37.74				
751 NA4FE(C1N)6(A)	303.9136		-120.7	-84.28		79.1	
752 NA3FE1C1O(C1N)5(C)	282.9165		-119.9				
753 NA3FE1C1O(C1N)5(A)	282.9165		-126.1				
754 NA3FE1C1O(C1N)5(AU)	282.9165		-125.7				
755 NA3FE1C1O(C1N)5:7H2O(C)	409.0243		-611.2				
756 NA1H3FE(C1N)6(A)	237.9682		51.5				
757 NA2H2FE(C1N)6(A)	259.9500		-5.9	32.18		80.	
758 NA3H1FE(C1N)6(A)	281.9318		-63.3	-27.38		84.	
759 NA1H2FE1C1O(C1N)5(A)	238.9529		-11.1				
760 NA2H1FE1C1O(C1N)5(A)	260.9347		-68.8				
761 NA1PD1CL3(A)	235.7488			-128.6			
762 NA2PD1CL4(A)	294.1916		-239.6	-224.8		90.	
763 NA2PD1CL6(A)	365.0976		-258.	-228.0		93.	
764 NA1PD1BR3(A)	369.1168			-111.4			
765 NA2PD1BR4(A)	472.0156		-203.6	-201.2		98.	
766 NA2PD1BR6(A)	631.8336			-205.3			

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
767	NA2PD1I4(A)	659.9972			-163.2			
768	NA2PD1I6(A)	913.8060			-165.9			
769	NA2PD(N102)4(A)	336.4016			-146.3			
770	NA2PD(C1N)4(A)	256.4512			25.0			
771	NA2PD(C1N1S)4(A)	384.7072			-27.1			
772	NA3RH1CL6(C)	384.5924		-366.7				
773	NA3RH1CL6(A)	384.5924		-375.0				
774	NA3RH1CL6(AU)	384.5924		-375.0				
775	NA3RH1CL6:12H2O(C)	600.7772		-1215.4				
776	NA1RU104(A)	188.0574			-121.3			
777	NA2RU104(A)	211.0472			-197.8			
778	NA2RU104(AU) IN 0.97 NA101H	211.0472		-227.5				
779	NA1PT1CL3(A)	324.4388			-117.2			
780	NA2PT1CL4(A)	382.8816		-235.1	-213.3		68.	
781	NA2PT1CL6(C)	453.7876		-266.8				
782	NA2PT1CL6(A)	453.7876		-276.	-242.		80.8	
783	NA2PT1CL6(AU)	453.7876		-275.8				
784	NA2PT1CL6:2H2O(C)	489.8184		-412.7				
785	NA2PT1CL6:6H2O(C)	561.8800		-696.7				
786	NA2PT1BR4(AU)	560.7056		-204.				
787	NA2PT1BR6(C)	720.5236		-218.5				
788	NA2PT1BR6(AU)	720.5236		-229.				
789	NA2PT1BR6:6H2O(C)	828.6160		-647.1				
790	NA2PT1I6(AU)	1002.4960		-166.				
791	NA2PT(C1N)4(A)	345.1412			43.7			
792	NA2IR1CL6(AU)	450.8976		-262.9				
793	NA3IR1CL6(AU)	473.8874		-351.7				
794	NA2OS1CL6(C)	448.8976		-268.				
795	NA1MN104(A)	141.9254		-186.8	-169.5		59.8	
796	NA2MN104(A)	164.9152		-271.	-244.9		42.	
797	NA1MN1CL3(A)	184.2868			-210.8			
798	NA4MN(C1N)6(A)	303.0046		-97.				
799	NA1RE104(A)	273.1874		-245.6	-228.6		62.2	7.9
800	NA2RE1CL6(A)	444.8976		-297.	-266.		88.	
801	NA2CR104(C)	161.9732		-320.8	-294.7		40.7	
802	NA2CR104(A)	161.9732		-325.38	-299.15		40.2	
803	NA2CR104(AU) IN 6000H2O + 0.1N NAOH	161.9732		-325.2				
804	NA2CR104(10H2O)	161.9732		-328.1				
805	NA2CR104(800H2O)	161.9732		-324.5				
806	NA2CR104:4H2O(C)	234.0348		-604.2				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
807 NA2CR104:10H2O(C)	342.1272		-1022.7				
808 NA2CR207(C)	261.9674		-472.9				
809 NA2CR207(A)	261.9674		-471.0	-436.2		90.8	
810 NA2CR207(200H2O)	261.9674		-470.5				
811 NA2CR207(300H2O)	261.9674		-470.3				
812 NA2CR207(400H2O)	261.9674		-470.1				
813 NA2CR207(500H2O)	261.9674		-470.0				
814 NA2CR207(600H2O)	261.9674		-469.9				
815 NA2CR207(800H2O)	261.9674		-469.8				
816 NA2CR207(1000H2O)	261.9674		-469.7				
817 NA2CR207(1200H2O)	261.9674		-469.6				
818 NA2CR207:2H2O(C)	297.9982		-615.4				
819 NA1H1CR104(A) FROM NA+, HCRO4-	139.9914		-267.3	-245.4		58.1	
820 NA2CR104:4NA101H(C)	321.9620		-730.6				
821 NA2MO104(C)	205.9172		-350.89	-323.69		38.1	33.87
822 NA2MO104(A)	205.9172		-353.3	-325.1		34.7	
823 NA2MO104(AU) IN DILUTE NAOH	205.9172		-353.1				
824 NA2MO104:2H2O(C)	241.9480		-492.8				
825 NA2MO105(1100H2O)	221.9166		-327.5				
826 NA2MO106:H2O(C)	255.9314		-396.4				
827 NA2MO108:2H2O(C)	305.9456		-422.2				
828 NA2MO108:4H2O(C)	341.9764		-561.2				
829 NA2MO207(C)	349.8554		-536.58	-491.92		59.9	51.90
830 NA1H1MO105(1100H2O)	199.9348		-279.2				
831 MO1F6:2NA1F(C)	293.9068		-660.2				
832 NA2W104(C)	293.8272		-370.2	-342.8		38.5	33.40
833 NA2W104(A)	293.8272		-371.9				
834 NA2W104(AU) IN DILUTE NAOH	293.8272		-371.6				
835 NA2W104:2H2O(C)	329.8580		-511.5				
836 NA2W106:H2O(C)	343.8414		-418.8				
837 NA2W108:2H2O(C)	393.8556		-438.2				
838 NA2W207(C)	525.6754		-575.0	-530.0		60.8	51.36
839 NA2W4013(C)	989.3718		-993.7				
840 NA5H1W6021(AU)	1555.0444		-1682.6				
841 W1F6:2NA1F(C)	381.8168		-705.3				
842 NA1V103(C)	121.9300		-273.85	-254.34		27.2	23.32
843 NA1V103(A)	121.9300		-269.7	-249.9		26.	
844 NA3V104(C)	183.9090		-420.14	-391.42		45.3	39.40
845 NA3V104(A)	183.9090			-402.7			
846 NA3V104:1/2H2O(C1) (C,ORTHO)	192.9167		-456.4				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
847	NA3V1O4:1/2H2O(C2) (C, 'PSEUDOSALT')	192.9167		-456.6				
848	NA3V1O4:2H2O(C2) (C,ORTHO)	219.9398		-564.1				
849	NA3V1O4:7/2H2O(C2) (C, 'PSEUDOSALT')	246.9629		-672.8				
850	NA3V1O4:7H2O(C2) (C,ORTHO)	310.0168		-921.9				
851	NA3V1O4:8H2O(C2) (C, 'PSEUDOSALT')	328.0322		-993.0				
852	NA3V1O4:10H2O(C2) (C,ORTHO)	364.0630		-1132.4				
853	NA3V1O4:10H2O(C3) (C, 'PSEUDOSALT')	364.0630		-1133.5				
854	NA3V1O4:12H2O(C3) (C,ORTHO)	400.0938		-1272.5				
855	NA3V1O4:12H2O(C4) (C, 'PSEUDOSALT')	400.0938		-1273.8				
856	NA4V2O7(C)	305.8390		-697.62	-650.46		76.1	64.47
857	NA4V2O7:2H2O(C)	341.8698		-839.6				
858	NA4V2O7:10H2O(C)	485.9930		-1405.7				
859	NA4V2O7:12H2O(C)	522.0238		-1546.9				
860	NA4V2O7:18H2O(C)	630.1162		-1970.9				
861	NA1H2V1O4(A)	139.9454		-338.0	-306.6		43.	
862	NA1H3V2O7(A)	239.8936			-508.1			
863	NA3H1V2O7(A)	283.8572			-616.2			
864	NA4H2V10O28(A)	1051.3784			-2096.			
865	NA5H1V10O28(A)	1073.3602		-2365.	-2154.		124.	
866	NA1TA1F6(A)	317.9282			-271.8			
867	NA2TA1F7(A)	359.9164			-405.4			
868	NA1MG1FE(C1N)6(A)	259.2562			-0.8			
869	NA2MG1FE(C1N)6(A)	282.2460			-73.0			
870	NA1CA1FE(C1N)6(A)	275.0242			-24.5			
871	NA2CA1FE(C1N)6(A)	298.0140			-96.6			
872	NA1SR1FE(C1N)6(A)	322.5642			-25.9			

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA	WT	DH0	DH298	DG298	H298 - H0	S298	CP298
1	K(CS)	39.1020	0	0	0	1.695	15.34	7.07
2	K+(A)	39.1020		-60.32	-67.70		24.5	5.2
3	K2O(C)	94.2034		-86.4				
4	K1O1H(C)	56.1094		-101.521				
5	K1O1H(A)	56.1094		-115.29	-105.29		21.9	-30.3
6	K1O1H(3H2O)	56.1094		-112.204				
7	K1O1H(3.5H2O)	56.1094		-112.644				
8	K1O1H(4H2O)	56.1094		-113.039				
9	K1O1H(4.5H2O)	56.1094		-113.409				
10	K1O1H(5H2O)	56.1094		-113.698				
11	K1O1H(6H2O)	56.1094		-114.028				
12	K1O1H(8H2O)	56.1094		-114.430				
13	K1O1H(10H2O)	56.1094		-114.657				
14	K1O1H(12H2O)	56.1094		-114.796				
15	K1O1H(15H2O)	56.1094		-114.920				
16	K1O1H(20H2O)	56.1094		-115.007				
17	K1O1H(25H2O)	56.1094		-115.034				
18	K1O1H(30H2O)	56.1094		-115.050				
19	K1O1H(40H2O)	56.1094		-115.072				
20	K1O1H(50H2O)	56.1094		-115.086				
21	K1O1H(75H2O)	56.1094		-115.104				
22	K1O1H(100H2O)	56.1094		-115.114				
23	K1O1H(150H2O)	56.1094		-115.129				
24	K1O1H(200H2O)	56.1094		-115.139				
25	K1O1H(300H2O)	56.1094		-115.156				
26	K1O1H(400H2O)	56.1094		-115.166				
27	K1O1H(500H2O)	56.1094		-115.175				
28	K1O1H(600H2O)	56.1094		-115.182				
29	K1O1H(700H2O)	56.1094		-115.188				
30	K1O1H(800H2O)	56.1094		-115.193				
31	K1O1H(900H2O)	56.1094		-115.198				
32	K1O1H(1000H2O)	56.1094		-115.201				
33	K1O1H(1500H2O)	56.1094		-115.215				
34	K1O1H(2000H2O)	56.1094		-115.223				
35	K1O1H(3000H2O)	56.1094		-115.234				
36	K1O1H(4000H2O)	56.1094		-115.240				
37	K1O1H(5000H2O)	56.1094		-115.246				
38	K1O1H(7000H2O)	56.1094		-115.252				
39	K1O1H(10000H2O)	56.1094		-115.258				
40	K1O1H(20000H2O)	56.1094		-115.267				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
41 K1O1H(50000H2O)	56.1094		-115.274				
42 K1O1H(100000H2O)	56.1094		-115.279				
43 K1O1H(00H2O)	56.1094		-115.29				
44 K1O1H:H2O(C)	74.1248		-180.105				
45 K1O1H:3/2H2O(C)	83.1325		-215.262				
46 K1H1O2(A)	72.1088		-98.64	-83.8		30.2	
POTASSIUM HYDROPEROXIDE; FROM K+, HO2-							
47 K1F(C)	58.1004		-135.58	-128.53		15.91	11.72
48 K1F(A)	58.1004		-139.82	-134.34		21.2	-20.3
49 K1F(3.5H2O)	58.1004		-138.155				
50 K1F(4H2O)	58.1004		-138.441				
51 K1F(4.5H2O)	58.1004		-138.670				
52 K1F(5H2O)	58.1004		-138.850				
53 K1F(6H2O)	58.1004		-139.101				
54 K1F(8H2O)	58.1004		-139.362				
55 K1F(10H2O)	58.1004		-139.478				
56 K1F(12H2O)	58.1004		-139.536				
57 K1F(15H2O)	58.1004		-139.579				
58 K1F(20H2O)	58.1004		-139.607				
59 K1F(25H2O)	58.1004		-139.617				
60 K1F(30H2O)	58.1004		-139.625				
61 K1F(40H2O)	58.1004		-139.633				
62 K1F(50H2O)	58.1004		-139.639				
63 K1F(75H2O)	58.1004		-139.649				
64 K1F(100H2O)	58.1004		-139.655				
65 K1F(150H2O)	58.1004		-139.666				
66 K1F(200H2O)	58.1004		-139.674				
67 K1F(300H2O)	58.1004		-139.688				
68 K1F(400H2O)	58.1004		-139.699				
69 K1F(500H2O)	58.1004		-139.707				
70 K1F(600H2O)	58.1004		-139.713				
71 K1F(700H2O)	58.1004		-139.719				
72 K1F(800H2O)	58.1004		-139.724				
73 K1F(900H2O)	58.1004		-139.728				
74 K1F(1000H2O)	58.1004		-139.731				
75 K1F(1500H2O)	58.1004		-139.745				
76 K1F(2000H2O)	58.1004		-139.753				
77 K1F(3000H2O)	58.1004		-139.764				
78 K1F(4000H2O)	58.1004		-139.771				
79 K1F(5000H2O)	58.1004		-139.776				
80 K1F(7000H2O)	58.1004		-139.782				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
81 K1F(10000H2O)	58.1004		-139.788				
82 K1F(20000H2O)	58.1004		-139.797				
83 K1F(50000H2O)	58.1004		-139.805				
84 K1F(100000H2O)	58.1004		-139.809				
85 K1F(00H2O)	58.1004		-139.82				
86 K1F:2H2O(C)	94.1312		-278.116				
87 K1H1F2(A)	78.1068		-215.66	-205.88		46.6	
POTASSIUM BIFLUORIDE; FROM K+, HF2-							
88 K1CL(C)	74.5550		-104.385				
89 K1CL(A)	74.5550		-100.27	-99.07		38.0	-27.4
90 K1CL(12H2O)	74.5550		-100.720				
91 K1CL(15H2O)	74.5550		-100.635				
92 K1CL(20H2O)	74.5550		-100.533				
93 K1CL(25H2O)	74.5550		-100.460				
94 K1CL(30H2O)	74.5550		-100.409				
95 K1CL(40H2O)	74.5550		-100.343				
96 K1CL(50H2O)	74.5550		-100.302				
97 K1CL(75H2O)	74.5550		-100.247				
98 K1CL(100H2O)	74.5550		-100.220				
99 K1CL(150H2O)	74.5550		-100.198				
100 K1CL(200H2O)	74.5550		-100.189				
101 K1CL(300H2O)	74.5550		-100.185				
102 K1CL(500H2O)	74.5550		-100.188				
103 K1CL(600H2O)	74.5550		-100.191				
104 K1CL(800H2O)	74.5550		-100.196				
105 K1CL(1000H2O)	74.5550		-100.200				
106 K1CL(1500H2O)	74.5550		-100.208				
107 K1CL(2000H2O)	74.5550		-100.213				
108 K1CL(3000H2O)	74.5550		-100.220				
109 K1CL(4000H2O)	74.5550		-100.225				
110 K1CL(5000H2O)	74.5550		-100.229				
111 K1CL(7000H2O)	74.5550		-100.234				
112 K1CL(10000H2O)	74.5550		-100.239				
113 K1CL(20000H2O)	74.5550		-100.248				
114 K1CL(50000H2O)	74.5550		-100.256				
115 K1CL(100000H2O)	74.5550		-100.260				
116 K1CL(00H2O)	74.5550		-100.27				
117 K1CL3(A)	145.4610			-96.5			
118 K1CL1O(A)	90.5544		-85.9	-76.5		35.	
119 K1CL1O2(A)	106.5538		-76.2	-63.6		48.7	
120 K1CL1O3(C)	122.5532		-93.890	-69.645		34.17	

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
121	K1CL103(A)	122.5532		-84.0	-68.5		63.3	
122	K1CL103(100H2O)	122.5532		-84.55				
123	K1CL103(150H2O)	122.5532		-84.31				
124	K1CL103(200H2O)	122.5532		-84.20				
125	K1CL103(300H2O)	122.5532		-84.09				
126	K1CL103(400H2O)	122.5532		-84.05				
127	K1CL103(500H2O)	122.5532		-84.03				
128	K1CL103(1000H2O)	122.5532		-83.99				
129	K1CL103(3000H2O)	122.5532		-83.97				
130	K1CL103(10000H2O)	122.5532		-83.98				
131	K1CL103(100000H2O)	122.5532		-83.99				
132	K1CL1C3(00H2O)	122.5532		-84.0				
133	K1CL104(C)	138.5526		-103.430	-72.46		36.1	26.34
134	K1CL104(A)	138.5526		-91.23	-69.76		68.0	
135	K1CL104(600H2O)	138.5526		-91.33				
136	K1CL104(700H2O)	138.5526		-91.31				
137	K1CL104(800H2O)	138.5526		-91.30				
138	K1CL104(900H2O)	138.5526		-91.29				
139	K1CL104(1000H2O)	138.5526		-91.28				
140	K1CL104(5000H2O)	138.5526		-91.22				
141	K1CL104(10000H2O)	138.5526		-91.21				
142	K1CL104(100000H2O)	138.5526		-91.22				
143	K1CL104(00H2O)	138.5526		-91.23				
144	K1BR(C)	119.0110		-94.120				
145	K1BR(A)	119.0110		-89.37	-92.55		44.2	-28.7
146	K1BR(10H2O)	119.0110		-90.195				
147	K1BR(12H2O)	119.0110		-90.084				
148	K1BR(15H2O)	119.0110		-89.954				
149	K1BR(20H2O)	119.0110		-89.860				
150	K1BR(25H2O)	119.0110		-89.713				
151	K1BR(30H2O)	119.0110		-89.643				
152	K1BR(40H2O)	119.0110		-89.549				
153	K1BR(50H2O)	119.0110		-89.490				
154	K1BR(75H2O)	119.0110		-89.407				
155	K1BR(100H2O)	119.0110		-89.368				
156	K1BR(150H2O)	119.0110		-89.332				
157	K1BR(200H2O)	119.0110		-89.317				
158	K1BR(300H2O)	119.0110		-89.306				
159	K1BR(500H2O)	119.0110		-89.303				
160	K1BR(800H2O)	119.0110		-89.305				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
161 K1BR(1000H2O)	119.0110		-89.307				
162 K1BR(1500H2O)	119.0110		-89.313				
163 K1BR(2000H2O)	119.0110		-89.317				
164 K1BR(3000H2O)	119.0110		-89.324				
165 K1BR(4000H2O)	119.0110		-89.328				
166 K1BR(5000H2O)	119.0110		-89.332				
167 K1BR(7000H2O)	119.0110		-89.336				
168 K1BR(10000H2O)	119.0110		-89.341				
169 K1BR(20000H2O)	119.0110		-89.349				
170 K1BR(50000H2O)	119.0110		-89.356				
171 K1BR(100000H2O)	119.0110		-89.360				
172 K1BR(00H2O)	119.0110		-89.37				
173 K1BR3(A)	278.8290		-91.49	-93.29		76.0	
174 K1BR5(A)	438.6470		-94.3	-92.5		100.2	
175 K1BR10(A)	135.0104		-82.8	-75.7		34.	
176 K1BR103(C)	167.0092		-90.130				
177 K1BR103(A)	167.0092		-80.3	-67.3		63.5	
178 K1BR103(500H2O)	167.0092		-80.34				
179 K1BR103(600H2O)	167.0092		-80.32				
180 K1BR103(800H2O)	167.0092		-80.31				
181 K1BR103(1000H2O)	167.0092		-80.30				
182 K1BR103(5000H2O)	167.0092		-80.27				
183 K1BR103(10000H2O)	167.0092		-80.28				
184 K1BR103(100000H2O)	167.0092		-80.30				
185 K1BR103(00H2O)	167.0092		-80.3				
186 K1BR2CL(A)	234.3730		-101.0	-98.4		69.6	
187 K1I(C)	166.0064		-78.370				
188 K1I(A)	166.0064		-73.51	-80.03		51.1	-28.8
189 K1I(8H2O)	166.0064		-74.848				
190 K1I(10H2O)	166.0064		-74.658				
191 K1I(12H2O)	166.0064		-74.509				
192 K1I(15H2O)	166.0064		-74.342				
193 K1I(20H2O)	166.0064		-74.149				
194 K1I(25H2O)	166.0064		-74.019				
195 K1I(30H2O)	166.0064		-73.927				
196 K1I(40H2O)	166.0064		-73.803				
197 K1I(50H2O)	166.0064		-73.724				
198 K1I(75H2O)	166.0064		-73.620				
199 K1I(100H2O)	166.0064		-73.565				
200 K1I(150H2O)	166.0064		-73.512				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
201 K1I(200H2O)	166.0064		-73.488				
202 K1I(300H2O)	166.0064		-73.466				
203 K1I(400H2O)	166.0064		-73.457				
204 K1I(600H2O)	166.0064		-73.452				
205 K1I(800H2O)	166.0064		-73.451				
206 K1I(900H2O)	166.0064		-73.452				
207 K1I(1000H2O)	166.0064		-73.453				
208 K1I(2000H2O)	166.0064		-73.459				
209 K1I(3000H2O)	166.0064		-73.465				
210 K1I(4000H2O)	166.0064		-73.469				
211 K1I(5000H2O)	166.0064		-73.473				
212 K1I(7000H2O)	166.0064		-73.477				
213 K1I(10000H2O)	166.0064		-73.481				
214 K1I(20000H2O)	166.0064		-73.489				
215 K1I(50000H2O)	166.0064		-73.496				
216 K1I(100000H2O)	166.0064		-73.500				
217 K1I(00H2O)	166.0064		-73.51				
218 K1I3(A)	419.8152		-72.6	-80.0		81.7	
219 K1I1O(A)	182.0058		-86.0	-76.9		23.2	
220 K1I1O3(C)	214.0046		-119.83	-100.00		36.20	
221 K1I1O3(A)	214.0046		-113.2	-98.3		52.8	
222 K1I1O3(500H2O)	214.0046		-113.32				
223 K1I1O3(600H2O)	214.0046		-113.28				
224 K1I1O3(800H2O)	214.0046		-113.25				
225 K1I1C3(1000H2O)	214.0046		-113.23				
226 K1I1O3(2000H2O)	214.0046		-113.19				
227 K1I1O3(10000H2O)	214.0046		-113.18				
228 K1I1O3(100000H2O)	214.0046		-113.19				
229 K1I1O3(00H2O)	214.0046		-113.2				
230 K1I1O4(AU)	230.0040		-95.5				
FROM K+, IO4-(AU)							
231 K2I2O(A)	348.0122			-155.1			
232 K1H4I1O6(AU)	266.0348		-240.7				
FROM K+, H4IO6-(AU)							
233 K1I2O1H(A)	309.9182			-122.7			
234 K2H3I1O6(AU)	304.1288		-300.2				
FROM 2K+, H3IO6-2(AU)							
235 K1I1CL2(A)	236.9124			-106.2			
236 K1I2CL(A)	328.3638		-93.2	-95.5		77.6	
237 K1I1BR2(A)	325.8244			-97.1			
238 K1BR1I2(A)	372.8198		-90.9	-94.0		71.7	
239 K1I1BR1CL(A)	281.3684			-102.7			
240 K2S(A)	110.2680		-112.7	-114.9		45.5	

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
241 K2S2(A)	142.3320		-113.4	-116.4		55.8	
242 K2S3(A)	174.3960		-114.4	-117.8		64.8	
243 K2S4(A)	206.4600		-115.1	-116.9		73.7	
244 K2S5(A)	238.5240		-115.5	-119.7		82.6	
245 K2S103(A)	158.2662		-272.5	-251.7		42.	
246 K2S104(C)	174.2656		-343.69				
247 K2S104(A)	174.2656		-337.96	-313.37		53.8	-60.
248 K2S2C3(AU)	190.3302		-276.5				
FROM 2K+, S2O3-2(AU)							
249 K2S204(A)	206.3296		-300.7	-278.9		71.	
250 K2S206(AU)	238.3284		-407.0				
FROM 2K+, S2O6-2(AU)							
251 K2S207(AU)	254.3278		-455.5				
FROM 2K+, S2O7-2(AU)							
252 K2S208(A)	270.3272		-440.6	-400.8		108.3	
253 K2S306(AU)	270.3924		-407.3				
FROM 2K+, S3O6-2(AU)							
254 K2S406(AU)	302.4564		-413.22				
FROM 2K+, S4O6-2(AU)							
255 K2S506(AU)	334.5204		-416.1				
FROM 2K+, S5O6-2(AU)							
256 K1H1S(C)	72.1740		-63.36				
257 K1H1S(A)	72.1740		-64.5	-64.82		39.5	
FROM K+, HS-							
258 K1H1S103(A)	120.1722		-209.99	-193.85		57.9	
FROM K+, HSO3-2							
259 K1H1S104(A)	136.1716		-272.40	-248.39		56.0	-15.
FROM K+, HSO4-							
260 K1H1S204(A)	168.2356			-214.6			
FROM K+, HS2O4-							
261 K1S103F(AU)	138.1626		-253.3				
FROM K+, SO3F-(AU)							
262 K2SE(A)	157.1640			-104.5			
263 K2SE103(A)	205.1622		-242.3	-223.8		52.1	
264 K2SE104(A)	221.1616		-263.8	-240.9		61.9	
265 K1H1SE(A)	119.0700		-56.5	-57.2		43.	
FROM K+, HSE-							
266 K1H1SE103(A)	167.0682		-183.30	-166.06		56.8	
FROM K+, HSEO3-							
267 K1H1SE104(A)	183.0676		-199.3	-175.8		60.2	
FROM K+, HSEO4-							
268 K2TE103(AU)	253.8022		-263.2				
FROM 2K+, TEO3-(AU)							
269 K1HSTE1C6(AU)	267.7364		-361.8				
FROM K+, HSTEC6-(AU)							

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	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
270 K2H4TE1O6(AU)	305.8324		-412.7				
FROM 2K+, H4TEO6(AU)							
271 K2P01CL6(A)	500.9220			-273.			
272 K1N3(A)	81.1221		5.44	15.5		50.3	
FROM K+, N3-							
273 K1N1O2(C)	85.1075		-88.490				
274 K1N1O2(A)	85.1075		-85.3	-76.6		58.0	-18.1
275 K1N1O3(C)	101.1069		-118.220				
276 K1N1O3(A)	101.1069		-109.88	-94.31		59.5	-15.5
POTASSIUM NITRATE							
277 K1O1N1O2(AU2)	101.1069		-71.0				
POTASSIUM PEROXYNITRITE; FROM K+, ONO2-(AU)							
278 K1N1O3(15H2O)	101.1069		-111.679				
279 K1N1O3(20H2O)	101.1069		-111.393				
280 K1N1O3(25H2O)	101.1069		-111.187				
281 K1N1O3(30H2O)	101.1069		-111.030				
282 K1N1O3(40H2O)	101.1069		-110.811				
283 K1N1O3(50H2O)	101.1069		-110.659				
284 K1N1O3(75H2O)	101.1069		-110.427				
285 K1N1O3(100H2O)	101.1069		-110.298				
286 K1N1O3(150H2O)	101.1069		-110.154				
287 K1N1O3(200H2O)	101.1069		-110.076				
288 K1N1O3(300H2O)	101.1069		-109.994				
289 K1N1O3(400H2O)	101.1069		-109.953				
290 K1N1O3(500H2O)	101.1069		-109.928				
291 K1N1O3(600H2O)	101.1069		-109.911				
292 K1N1O3(700H2O)	101.1069		-109.900				
293 K1N1O3(800H2O)	101.1069		-109.891				
294 K1N1O3(900H2O)	101.1069		-109.884				
295 K1N1O3(1000H2O)	101.1069		-109.879				
296 K1N1O3(1500H2O)	101.1069		-109.866				
297 K1N1O3(2000H2O)	101.1069		-109.861				
298 K1N1O3(3000H2O)	101.1069		-109.856				
299 K1N1O3(5000H2O)	101.1069		-109.855				
300 K1N1O3(10000H2O)	101.1069		-109.857				
301 K1N1O3(20000H2O)	101.1069		-109.861				
302 K1N1O3(50000H2O)	101.1069		-109.866				
303 K1N1O3(100000H2O)	101.1069		-109.870				
304 K1N1O3(00H2O)	101.1069		-109.88				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
305	K2N2O2(AU)	138.2162		-124.7				
	POTASSIUM HYPONITRITE							
	SUM 2K+, N2O2-2(AU)							
306	K1H1N2O2(AU)	100.1222		-72.7				
	POTASSIUM HYPONITRITE							
	SUM K+, HN2O2-(AU)							
307	K1P1O3(A)	118.0740		-293.8				
	POTASSIUM METAPHOSPHATE							
308	K3P1O4(A)	212.2774		-486.3	-446.6		21.0	
309	K4P2O7(A)	330.3514		-784.1	-729.5		70.	
310	K1H2P1O2(A)	104.0906		-207.0				
	SUM K+, H2PO2-							
311	K1H2P1O3(AU)	120.0900		-292.0				
	SUM K+, H2PO3-(AU)							
312	K1H2P1O4(C)	136.0894		-375.40	-338.98		32.23	
313	K1H2P1O4(A)	136.0894		-370.14	-337.87		46.1	
	SUM K+, H2PO4-							
314	K1H3P2O7(A)	216.0694		-604.4	-551.3		75.	
	SUM K+, H3P2O7-							
315	K2H1P1O3(AU)	158.1840		-352.2				
	SUM 2K+, HPO3-2(AU)							
316	K2H1P1O4(A)	174.1834		-429.47	-395.74		41.0	
	SUM 2K+, HPO4-2							
317	K2H2P2O7(A)	254.1634		-665.2	-615.9		88.	
	SUM 2K+, H2P2O7-2							
318	K3H1P2O7(A)	292.2574		-724.7	-674.5		84.	
	SUM 3K+, HP2O7-3							
319	K2P1O3F(A)	176.1744			-416.2			
320	K1H1P1O3F(A)	138.0804			-354.1			
321	K1AS1O2(A)	146.0224		-162.86	-151.36		34.2	
322	K3AS1O4(A)	256.2252		-393.23	-358.10		34.6	
323	K1H2AS1O3(A)	164.0378		-231.16	-208.05		50.9	
	SUM K+, H2ASO3-							
324	K1H2AS1O4(A)	180.0372		-277.71	-247.74		52.	
	SUM K+, H2ASO4-							
325	K2H1AS1O4(A)	218.1312		-337.26	-306.22		48.6	
	SUM 2K+, HASO4-2							
326	K2AS1O3F(A)	220.1222			-380.99			
327	K1H1AS1O3F(A)	182.0282			-321.30			
	SUM K+, HASO3F-							
328	K1SE1O2(A)	192.8508			-149.02			
329	K2SE2S4(A)	449.9600		-173.0	-159.2		36.5	
330	K1BI1CL4(A)	389.8940			-182.8			
331	K3BI1CL6(A)	539.0040			-381.61			
332	K1BI1BR4(A)	567.7180			-157.9			
333	K1BI1I4(A)	755.6996			-117.6			

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	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
334 K2N1H4B11CL6(A)	517.9407			-333.0			
335 K2C103(C)	138.2134		-275.0	-254.7		37.4	27.65
POTASSIUM CARBONATE							
336 K2C103(A)	138.2134		-282.48	-261.57		35.4	
337 K2C103(25H2O)	138.2134		-282.43				
338 K2C103(50H2O)	138.2134		-282.40				
339 K2C103(75H2O)	138.2134		-282.34				
340 K2C103(100H2O)	138.2134		-282.29				
341 K2C103(150H2O)	138.2134		-282.22				
342 K2C103(200H2O)	138.2134		-282.16				
343 K2C103(300H2O)	138.2134		-282.08				
344 K2C103(400H2O)	138.2134		-282.02				
345 K2C103(500H2O)	138.2134		-281.97				
346 K2C103(600H2O)	138.2134		-281.92				
347 K2C103(800H2O)	138.2134		-281.86				
348 K2C103(1000H2O)	138.2134		-281.8				
349 K2C103(1500H2O)	138.2134		-281.69				
350 K2C103(2000H2O)	138.2134		-281.60				
351 K2C103:0.5H2O(C)	147.2211		-311.4				
352 K2C103:1.5H2O(C)	165.2365		-384.4	-342.4		48.1	
353 K2C204(C)	166.2240		-321.3				
POTASSIUM OXALATE							
354 K2C204(A)	166.2240		-317.8	-296.5		59.9	
355 K2C204(25H2O)	166.2240		-317.96				
356 K2C204(30H2O)	166.2240		-317.89				
357 K2C204(40H2O)	166.2240		-317.80				
358 K2C204(50H2O)	166.2240		-317.73				
359 K2C204(75H2O)	166.2240		-317.63				
360 K2C204(100H2O)	166.2240		-317.58				
361 K2C204(150H2O)	166.2240		-317.51				
362 K2C204(200H2O)	166.2240		-317.49				
363 K2C204(400H2O)	166.2240		-317.46				
364 K2C204(1000H2O)	166.2240		-317.48				
365 K2C204(1500H2O)	166.2240		-317.50				
366 K2C204(2000H2O)	166.2240		-317.52				
367 K2C204(3000H2O)	166.2240		-317.55				
368 K2C204(4000H2O)	166.2240		-317.58				
369 K2C204(5000H2O)	166.2240		-317.60				
370 K2C204(7000H2O)	166.2240		-317.62				
371 K2C204(10000H2O)	166.2240		-317.65				
372 K2C204(20000H2O)	166.2240		-317.69				
373 K2C204(50000H2O)	166.2240		-317.72				

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
374	K2C2O4(100000H2O)	166.2240		-317.74				
375	K2C2O4(00H2O)	166.2240		-317.8				
376	K2C2O4:H2O(C)	184.2394		-392.8				
	POTASSIUM OXALATE (HYDRATE)							
377	K1C1H1O2(C)	84.1200		-162.3				
	POTASSIUM FORMATE							
378	K1C1H1O2(A)	84.1200		-162.03	-151.6		46.	-15.8
379	K1C1H1O2(400H2O)	84.1200		-161.8				
380	K1H1C1O3(C)	100.1194		-229.8	-207.2		30.0	
	POTASSIUM BICARBONATE							
381	K1H1C1O3(A)	100.1194		-225.71	-207.96		46.3	
	K+, HCO3-							
382	K1H1C1O3(1500H2O)	100.1194		-225.1				
383	K1O1C1H3(A)	70.1366		-106.56	-84.66		14.6	
	POTASSIUM METHYLATE							
384	K1O1C1H3(60C1H3O1H)	70.1366		-108.2				
385	K1H1C2O4(A)	128.1300		-255.9	-234.63		60.2	
	POTASSIUM BIOXALATE: K+, HC2O4-							
386	K1H1C2O4(500H2O)	128.1300		-256.2				
387	K1C2H3O2(C)	98.1472		-172.82				
	POTASSIUM ACETATE							
388	K1C2H3O2(A)	98.1472		-176.48	-155.99		45.2	3.7
389	K1C2H3O2(4.5H2O)	98.1472		-174.320				
390	K1C2H3O2(5H2O)	98.1472		-174.530				
391	K1C2H3O2(5.5H2O)	98.1472		-174.682				
392	K1C2H3O2(6H2O)	98.1472		-174.810				
393	K1C2H3O2(7H2O)	98.1472		-175.010				
394	K1C2H3O2(8H2O)	98.1472		-175.160				
395	K1C2H3O2(9H2O)	98.1472		-175.268				
396	K1C2H3O2(10H2O)	98.1472		-175.360				
397	K1C2H3O2(12H2O)	98.1472		-175.490				
398	K1C2H3O2(15H2O)	98.1472		-175.610				
399	K1C2H3O2(20H2O)	98.1472		-175.748				
400	K1C2H3O2(25H2O)	98.1472		-175.833				
401	K1C2H3O2(30H2O)	98.1472		-175.886				
402	K1C2H3O2(40H2O)	98.1472		-175.964				
403	K1C2H3O2(50H2O)	98.1472		-176.020				
404	K1C2H3O2(75H2O)	98.1472		-176.108				
405	K1C2H3O2(100H2O)	98.1472		-176.158				
406	K1C2H3O2(150H2O)	98.1472		-176.215				
407	K1C2H3O2(200H2O)	98.1472		-176.248				
408	K1C2H3O2(300H2O)	98.1472		-176.290				
409	K1C2H3O2(400H2O)	98.1472		-176.315				
410	K1C2H3O2(500H2O)	98.1472		-176.332				

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		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
411	K1C2H3O2(600H2O)	98.1472		-176.344				
412	K1C2H3O2(800H2O)	98.1472		-176.361				
413	K1C2H3O2(900H2O)	98.1472		-176.368				
414	K1C2H3O2(1000H2O)	98.1472		-176.373				
415	K1C2H3O2(1500H2O)	98.1472		-176.393				
416	K1C2H3O2(2000H2O)	98.1472		-176.404				
417	K1C2H3O2(3000H2O)	98.1472		-176.417				
418	K1C2H3O2(4000H2O)	98.1472		-176.425				
419	K1C2H3O2(5000H2O)	98.1472		-176.431				
420	K1C2H3O2(7000H2O)	98.1472		-176.438				
421	K1C2H3O2(10000H2O)	98.1472		-176.445				
422	K1C2H3O2(20000H2O)	98.1472		-176.455				
423	K1C2H3O2(50000H2O)	98.1472		-176.464				
424	K1C2H3O2(100000H2O)	98.1472		-176.468				
425	K1C2H3O2(00H2O)	98.1472		-176.48				
426	C1H2O1H1C1O1O1K(C)	114.1466		-217.5				
	POTASSIUM HYDROXYACETATE							
427	K1C1H2O1H1C1O1O(A)	114.1466		-216.2				
428	C1H2O1H1C1O1O1K(2OOH2O)	114.1466		-216.0				
429	C1H2O1H1C1O1O1K:1/2H2O(C)	123.1543		-254.7				
	POTASSIUM HYDROXYACETATE HEMIHYDRATE							
430	K1O1C1H2C1H3(A)	84.1638			-92.2			
	POTASSIUM ETHYLATE							
431	K1O1C1H2C1H3(6OC2H5O1H)	84.1638		-115.9				
432	5(K2C1O3:3/2H2O):4K1H1C1O3(C)	1226.6601		-2840.				
433	K1C2CL3O2(A)	201.4822		-183.7				
	POTASSIUM TRICHLOROACETATE							
434	K1C2CL3C2(5OH2O)	201.4822		-183.8				
435	K1C2CL1H2O2(A)	132.5922		-180.13				
	POTASSIUM CHLOROACETATE							
436	K1C2CL2H1O2(A)	167.0372		-182.7				
	POTASSIUM DICHLOROACETATE							
437	(C1H1O)2:2K1H1S1O3(C)	298.3816		-531.1				
	GLYOXAL POTASSIUM BISULFITE							
438	(C1H1O)2:2K1H1S1O3(8OOH2O)	298.3816		-518.2				
439	K1C1N(C)	65.1199		-27.10				15.4
	(C,I,CUBIC)							
440	K1C1N(A)	65.1199		-24.3	-26.5		47.0	
441	K1C1N(2OOH2O)	65.1199		-24.0				
442	K1C1N1O(C)	81.1193		-100.04				
	POTASSIUM CYANATE							
443	K1C1N1O(A)	81.1193		-95.2	-91.0		50.0	
444	K1C1H2N1O2(AU)	99.1347		-80.6				
	POTASSIUM SALT OF NITROMETHANE: K+, CH2NO2-							

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
445	K1O1C1C1C1O1N1H2(C) POTASSIUM OXAMATE	127.1453		-220.5				
446	K1C2N1H4O2(A) POTASSIUM SALT OF GLYCINE: K+, C2NH4O2-	113.1619		-172.60	-142.98		53.0	
447	K1C2N1H4O2(A2) POTASSIUM SALT OF NITROETHANE: K+, C2NH4O2-	113.1619		-90.6				
448	K1C1N1I2(A) K+, CNI2-	318.9287			-35.17			
449	K1I(C1N)2(A) K+, (CN)2I-	218.0422			17.91			
450	K1C1N1S(C) POTASSIUM THIOCYANATE	97.1839		-47.84	-40.70		23.3	20.6
451	K1C1N1S(A)	97.1839		-42.05	-45.55		59.0	-4.4
452	K1C1N1S(2H2O)	97.1839		-44.690				
453	K1C1N1S(2.5H2O)	97.1839		-44.560				
454	K1C1N1S(3H2O)	97.1839		-44.440				
455	K1C1N1S(4H2O)	97.1839		-44.220				
456	K1C1N1S(4.5H2O)	97.1839		-44.112				
457	K1C1N1S(5H2O)	97.1839		-44.010				
458	K1C1N1S(6H2O)	97.1839		-43.840				
459	K1C1N1S(7H2O)	97.1839		-43.688				
460	K1C1N1S(8H2O)	97.1839		-43.570				
461	K1C1N1S(9H2O)	97.1839		-43.458				
462	K1C1N1S(10H2O)	97.1839		-43.360				
463	K1C1N1S(12H2O)	97.1839		-43.195				
464	K1C1N1S(15H2O)	97.1839		-43.015				
465	K1C1N1S(20H2O)	97.1839		-42.805				
466	K1C1N1S(25H2O)	97.1839		-42.661				
467	K1C1N1S(30H2O)	97.1839		-42.557				
468	K1C1N1S(40H2O)	97.1839		-42.418				
469	K1C1N1S(50H2O)	97.1839		-42.330				
470	K1C1N1S(75H2O)	97.1839		-42.204				
471	K1C1N1S(100H2O)	97.1839		-42.139				
472	K1C1N1S(150H2O)	97.1839		-42.074				
473	K1C1N1S(200H2O)	97.1839		-42.043				
474	K1C1N1S(300H2O)	97.1839		-42.015				
475	K1C1N1S(400H2O)	97.1839		-42.003				
476	K1C1N1S(500H2O)	97.1839		-41.998				
477	K1C1N1S(1000H2O)	97.1839		-41.994				
478	K1C1N1S(1500H2O)	97.1839		-41.998				
479	K1C1N1S(2000H2O)	97.1839		-42.001				
480	K1C1N1S(3000H2O)	97.1839		-42.005				
481	K1C1N1S(4000H2O)	97.1839		-42.010				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
482 K1C1N1S(5000H2O)	97.1839		-42.012				
483 K1C1N1S(7000H2O)	97.1839		-42.017				
484 K1C1N1S(10000H2O)	97.1839		-42.021				
485 K1C1N1S(20000H2O)	97.1839		-42.028				
486 K1C1N1S(50000H2O)	97.1839		-42.036				
487 K1C1N1S(100000H2O)	97.1839		-42.039				
488 K1C1N1S(00H2O)	97.1839		-42.05				
489 K1C1N1S:0.5S1O2(C)	129.2153		-88.9	-77.0		35.7	
490 K1C1N1S:2S1O2(C)	225.3095		-209.8	-183.2		71.2	
491 K1C1N1S2H2(A)	131.2639		-52.8				
POTASSIUM DITHIOCARBAMATE: K+, CNS2H2-							
492 K2C1N1S2H(A)	169.3579		-103.2				
DIPOTASSIUM DITHIOIMINOCARBONATE: 2K+, CNS2H2							
493 K1H1SI1(O1H)6(A)	170.2404			-482.3			
494 K2SI1F6(C)	220.2804		-709.				
495 K2SI1F6(A)	220.2804		-691.6	-661.1		78.2	
496 K1SN1CL3(A)	264.1510		-176.7	-170.5		87.	
497 K2SN1CL6(C)	409.6120		-355.6				
498 K2SN1CL6(AU)	409.6120		-352.5				
FROM 2K+, SNCL6-2(AU)							
499 K1SN1BR3(A)	397.5190		-149.9	-150.6		85.	
500 K1H1PB1O2(A)	279.2988			-148.60			
501 K1PB1(O1H)3(A)	297.3142			-205.3			
502 K1PB1CL3(A)	352.6510			-169.6			
503 K1PB1BR3(A)	486.0190			-149.7			
504 K1PB1I3(A)	627.0052			-115.2			
505 K2PB1I4(A)	793.0116			-196.3			
506 K2PB1P2O7(A)	459.3374			-615.2			
507 K6PB1P2O7(AU)	615.7454		-1448.5				
508 K1B1O2(A)	81.9118		-244.92	-229.97		15.6	
509 K2B4O7(A)	233.4438			-758.0			
510 K2O:4B2O3(C)	372.6842		-1422.3				
511 K2O:4B2O3(GL)	372.6842		-1405.0				
512 K1B1H4(C)	53.9450	-52.126	-54.21	-38.21	3.949	25.48	23.08
513 K1B1H4(A)	53.9450		-48.81	-40.39		50.9	
514 K1B1(O1H)4(A)	117.9426		-381.55	-343.35		49.0	
515 K1H2B1O3:H2O2(A)	133.9420			-320.5			
FROM K+, H2BO3:H2O2-							
516 K1H1B4O7(A)	195.3498			-709.5			
K+, HB4O7-							
517 K1B1F4(C)	125.9066	-448.69	-449.8	-426.8	5.09	36.4	26.4
518 K1B1F4(A)	125.9066		-436.7	-423.1		68.	
519 K1B1F2(C1H)2(A)	121.9246			-388.2			

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
520 K1B1F301H(C)	123.9156		-432.9				
521 K1B1F301H(A)	123.9156		-425.3	-405.8		64.	
522 K1B1F301H(400H2O)	123.9156		-425.6				
523 K2B3F40301H(C)	251.6362		-893.1				
524 K2B3F40301H(800H2O)	251.6362		-874.1				
525 K1AL1O2(A)	98.0823		-279.9	-264.5		20.	
526 K1AL(C1H)4(A)	134.1131		-416.5	-377.9		53.	
527 K3AL1F6(AU)	258.2779		-783.9				
528 K1AL(S1O4)2(C)	258.2067		-590.38	-535.40		48.9	46.12
529 K1AL(S1C4)2(A) FROM AL+3, K+, 2SO42-	258.2067		-622.	-540.		-42.8	
530 K1AL(S1O4)2(AU)	258.2067		-619.9				
531 K1AL(S1C4)2:H2O(C)	276.2221		-668.7				
532 K1AL(S1C4)2:2H2O(C)	294.2375		-743.				
533 K1AL(S1C4)2:3H2O(C)	312.2529		-815.				
534 K1AL(S1C4)2:12H2O(C)	474.3915		-1448.88	-1228.98		164.3	155.6
535 K3GA1O3(A)	235.0242			-351.			
536 K1H2GA1O3(A) FRCM K+, H2GAO3	158.8362			-246.			
537 K2H1GA1O3(A) FROM 2K+, HGAC3-2	196.9302			-299.			
538 K1GA1BR4(A)	428.4580		-218.5	-199.2		33.1	
539 K1TL(C1N)4(A)	347.5436			100.			
540 K2ZN1O2(A)	175.5728			-227.25			
541 K1H1ZN1C2(A) 542 FROM K+, HZNO2-	137.4788			-176.96			
K1ZN1O3H3(A)	155.4942			-233.65			
543 K2ZN(O1H)4(A)	211.6036			-340.63			
544 K1ZN1CL3(A)	210.8310			-196.9			
545 K2ZN1CL4(A)	285.3860			-294.6			
546 K1ZN1BR3(A)	344.1990			-175.0			
547 K1ZN1I3(A)	485.1852			-137.4			
548 K2ZN1I4(A)	651.1916			-216.7			
549 K2ZN(C1N)4(A)	247.6456		-38.8	-28.6		103.	
550 K2ZN(C1N)4(600H2O)	247.6456		-38.8				
551 K2ZN(C1N1S)4(A)	375.9016			-83.7			
552 K2CD1O2(A)	222.6028			-203.4			
553 K1H1CD1C2(A) FRCM K+, HCDO2-	184.5088			-154.6			
554 K1CD(O1H)3(A)	202.5242			-211.6			
555 K2CD(O1H)4(A)	258.6336			-316.7			
556 K1CD1CL3(A)	257.8610		-194.4	-184.1		73.0	
557 K1CD1BR3(A)	391.2290			-165.1			
558 K1CD1I3(A)	532.2152			-129.7			

NBS ALKALI METAL CMPD. THERMC. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
559 K2CD1I4(A)	698.2216		-202.3	-210.9		127.	
560 K1CD(N3)3(A)	277.5623			159.1			
561 K2CD(N3)4(A)	358.6844			174.1			
562 K2CD1P2O7(A)	364.5474			-624.5			
563 K1CD(C1N)3(A)	229.5557			17.1			
564 K2CD(C1N)4(A)	294.6756		-18.3	-14.1		126.	
565 K2CD(C1N)4(800H2O)	294.6756		-18.3				
566 K1CD(C1N1S)3(A)	325.7477			-22.4			
567 K1HG1CL3(A)	346.0510		-153.2	-141.6		75.	
568 K2HG1CL4(A)	420.6060		-253.0	-242.2		119.	
569 K1HG1BR3(A)	479.4190		-130.4	-129.7		86.	
570 K2HG1BR4(A)	598.4300		-223.6	-224.1		123.	
571 K1HG1I3(A)	620.4052		-96.8	-103.2		97.	
572 K2HG1I4(A)	786.4116		-176.8	-186.0		135.	
573 K1HG(C1N)3(A)	317.7457		34.6	43.0		78.3	
574 K2HG(C1N)4(A)	382.8656		5.2	12.4		122.	
575 K1HG(C1N1S)3(A)	413.9377			10.8			
576 K2HG(C1N1S)4(A)	511.1216		-42.6	-37.1		158.	
577 K2CU1O2(A)	173.7428			-179.3			
578 K1H1CU1C2(A)	135.6488			-129.5			
579 K1CU1CL2(A)	173.5480			-125.1			
580 K1CU1CL3(A)	209.0010			-225.			
581 K1CU(C1N)2(A)	154.6778			-6.1			
582 K2CU(C1N)3(A)	219.7977			-38.9			
583 K3CU(C1N)4(A)	284.9176			-67.7			
584 K3CU(C1N1S)4(A)	413.1736		-102.5	-116.1		227.	
585 K1AG1CL2(A)	217.8780		-118.9	-119.2		79.8	
586 K1AG1BR2(A)	306.7900			-108.9			
587 K2AG1BR3(A)	425.8010			-203.4			
588 K1AG1I2(A)	400.7808			-88.5			
589 K2AG1I3(A)	566.7872		-164.1	-172.2		109.5	
590 K3AG1I4(A)	732.7936			-253.2			
591 K1AG(C1N)2(A)	199.0078		4.3	5.3		71.	
592 K1AG(S1C1N)2(A)	263.1358			-16.3			
593 K2AG(S1C1N)3(A)	360.3197			-63.5			
594 K3AG(S1C1N)4(A)	457.5036			-109.4			
595 K1AU1CL4(A)	377.8810		-137.3	-123.92		88.3	
596 K1AU1BR4(A)	555.7050		-106.1	-107.7		104.8	
597 K1AU(C1N)2(A)	288.1048		-2.4	0.6		65.	
598 K1AL(S1C1N)2(A)	352.2328			-7.5			

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
599 K1AU(S1C1N)4(A)	468.3966			66.5			
600 K2NI(C1N)4(A)	240.9856		-32.7	-22.6		101.	
601 K(CC(N1H3)2(N1O2)4)(C)	316.1186		-231.1				
602 K(CC(N1H3)2(N1O2)4)(30000H2O)	316.1186		-217.9				
603 K3(CO(C2O4)3)(20000H2O)	440.2992		-752.2				
604 K3(CO(C2O4)3):3H2O(C)	494.3454		-975.0				
605 K3CC(C1N)6(C)	332.3466					96.0	73.8
606 K3CC(C1N)6(A)	332.3466					129.1	
607 K(CO(N1H3)2(N1O2)2C2O4)(C)	312.1276		-366.2				
608 K(CC(N1H3)2(N1O2)2C2O4)(17000H2O)	312.1276		-356.4				
609 K1FE(S1O4)2(A)	287.0722			-432.1			
610 K1FE(C1N)6-2(AO)	251.0564			-69.4			
611 K1FE(C1N)6-3(AO)	251.0564			95.2			
612 K3FE(C1N)6(C)	329.2604		-59.7	-30.97		101.8	75.60
613 K3FE(C1N)6(A) FROM 3K+, FE(CN)6-3	329.2604		-46.7	-28.8		138.1	
614 K3FE(C1N)6(500H2O)	329.2604		-46.41				
615 K3FE(C1N)6(600H2O)	329.2604		-46.34				
616 K3FE(C1N)6(800H2O)	329.2604		-46.30				
617 K3FE(C1N)6(1000H2O)	329.2604		-46.28				
618 K3FE(C1N)6(2000H2O)	329.2604		-46.26				
619 K3FE(C1N)6(5000H2O)	329.2604		-46.30				
620 K3FE(C1N)6(10000H2O)	329.2604		-46.35				
621 K3FE(C1N)6(20000H2O)	329.2604		-46.42				
622 K3FE(C1N)6(50000H2O)	329.2604		-46.50				
623 K3FE(C1N)6(100000H2O)	329.2604		-46.55				
624 K4FE(C1N)6(C)	368.3624		-142.0				
625 K4FE(C1N)6(A) FROM 4K+, FE(CN)6-4	368.3624		-132.4	-104.71		120.7	
626 K4FE(C1N)6(400H2O)	368.3624		-131.71				
627 K4FE(C1N)6(500H2O)	368.3624		-131.60				
628 K4FE(C1N)6(1000H2O)	368.3624		-131.45				
629 K4FE(C1N)6(2000H2O)	368.3624		-131.42				
630 K4FE(C1N)6(5000H2O)	368.3624		-131.50				
631 K4FE(C1N)6(10000H2O)	368.3624		-131.59				
632 K4FE(C1N)6(20000H2O)	368.3624		-131.82				
633 K4FE(C1N)6(50000H2O)	368.3624		-131.91				
634 K4FE(C1N)6:3H2O(C)	422.4086		-350.5	-281.14		148.	
635 K3FE1C1O(C1N)5(C)	331.2531		-138.9				
636 K3FE1C1O(C1N)5(A)	331.2531		-134.9				
637 K3FE1C1O(C1N)5(AU)	331.2531		-134.5				
638 K3FE1C1O(C1N)5:7/2H2O(C)	394.3070		-384.0				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
639	K1H2FE(C1N)6(AU)	253.0724		75.0				
640	K1H3FE(C1N)6(A)	254.0804		48.6				
641	K1H3FE(C1N)6(AU)	254.0804		50.0				
642	K2H1FE(C1N)6(AU)	291.1664		14.0				
643	K2H2FE(C1N)6(A)	292.1744		-11.7	21.97		101.	
644	K2H2FE(C1N)6(AU)	292.1744		-10.3				
645	K3H1FE(C1N)6(A)	330.2684		-72.1	-42.70		115.	
646	K3H1FE(C1N)6(AU)	330.2684		-70.9				
647	K1H2FE1C10(C1N)5(A)	255.0651		-14.0				
648	K1H2FE1C10(C1N)5(AU)	255.0651		-13.6				
649	K2H1FE1C10(C1N)5(A)	293.1591		-74.6				
650	K2H1FE1C10(C1N)5(AU)	293.1591		-74.2				
651	K1PD1CL3(A)	251.8610			-133.7			
652	K2PD1CL4(C)	326.4160		-259.7				
653	K2PD1CL4(A)	326.4160		-245.4	-235.0		111.	
654	K2PD1CL4(AU)	326.4160		-246.5				
655	K2PD1CL6(C)	397.3220		-278.0	-242.0		79.	
656	K2PD1CL6(A)	397.3220		-264.	-238.2		114.	
657	K2PD1CL6(AU)	397.3220		-264.				
658	K1PD1BR3(A)	385.2290			-116.5			
659	K2PD1BR4(C)	504.2400		-219.1				
660	K2PD1BR4(A)	504.2400		-209.4	-211.4		119.	
661	K2PD1BR4(AU)	504.2400		-207.1				
662	K2PD1BR6(A)	664.0580			-215.5			
663	K2PD1I4(A)	692.2216			-173.4			
664	K2PD1I6(A)	946.0304			-176.1			
665	K2PD(N102)4(A)	368.6260			-156.5			
666	K2PD(C1N)4(A)	288.6756			15.			
667	K2PD(C1N1S)4(A)	416.9316			-37.3			
668	K3RH1CL6(C)	432.9290		-377.				
669	K3RH1CL6(A)	432.9290			-383.8			
670	K1RU104(A)	204.1696			-126.4			
671	K2RU104(A)	243.2716			-208.0			
672	K1PT1CL3(A)	340.5510			-122.3			
673	K2PT1CL4(C)	415.1060		-252.6				43.1
674	K2PT1CL4(A)	415.1060		-240.9	-223.5		89.	
675	K2PT1CL4(AU)	415.1060		-240.9				
676	K2PT1CL6(C)	486.0120		-295.1	-259.1		79.8	49.09
677	K2PT1CL6(A)	486.0120		-282.	-252.		101.6	
678	K2PT1CL6(AU)	486.0120		-281.6				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
679 K2PT1BR4(C)	592.9300		-219.8				
680 K2PT1BR4(AU)	592.9300		-210.				
681 K2PT1BR6(C)	752.7480		-246.4				
682 K2PT1BR6(AU)	752.7480		-235.				
683 K2PT1I6(AU)	1034.7204		-172.				
684 K2(PT(N102)4)(C)	457.3160						64.9
685 K2(PT1N102CL3)(C)	425.6585						50.4
686 K2(PT(N102)2CL2)(C) CIS	436.2110						53.3
687 K2(PT(N102)3CL)(C)	446.7635						62.8
688 K(PT1N1H3CL3)(C)	357.5817		-181.6				
689 K2PT(C1N)4(A)	377.3656			33.5			
690 K2IR1CL6(C)	483.1220		-281.				
691 K2IR1CL6(AU)	483.1220		-268.7				
692 K3IR1CL6(C)	522.2240		-369.				
693 K3IR1CL6(AU)	522.2240		-360.5				
694 K2OS1CL6(C)	481.1220		-285.				
695 K1MN104(C)	158.0376		-200.1	-176.3		41.04	28.10
696 K1MN104(A)	158.0376		-189.7	-174.6		70.2	
697 K1MN104(140H2O)	158.0376		-190.24				
698 K1MN104(200H2O)	158.0376		-190.09				
699 K1MN104(300H2O)	158.0376		-189.99				
700 K1MN104(500H2O)	158.0376		-189.86				
701 K1MN104(1000H2O)	158.0376		-189.87				
702 K1MN104(1500H2O)	158.0376		-189.75				
703 K1MN104(2000H2O)	158.0376		-189.73				
704 K1MN104(5000H2O)	158.0376		-189.70				
705 K1MN104(10000H2O)	158.0376		-189.71				
706 K1MN104(00H2O)	158.0376		-189.7				
707 K2MN104(A)	197.1396		-277.	-255.1		63.	
708 K1MN1CL3(A)	200.3990			-215.9			
709 K4MN(C1N)6(A)	367.4534		-108.				
710 K1RE104(A)	289.2996		-248.5	-233.7		72.6	2.0
711 K2RE1CL6(A)	477.1220		-303.	-276.		109.	
712 K2CR104(C)	194.1976	-333.70	-335.4	-309.6	6.805	47.83	34.89
713 K2CR104(A)	194.1976		-331.24	-309.36		61.0	
714 K2CR104(17H2O)	194.1976		-332.61				
715 K2CR104(20H2O)	194.1976		-332.53				
716 K2CR104(25H2O)	194.1976		-332.38				
717 K2CR104(35H2O)	194.1976		-332.25				
718 K2CR104(45H2O)	194.1976		-332.03				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
719	K2CR1O4(55H2O)	194.1976		-331.86				
720	K2CR1O4(60H2O)	194.1976		-331.72				
721	K2CR1O4(75H2O)	194.1976		-331.57				
722	K2CR1O4(100H2O)	194.1976		-331.40				
723	K2CR1O4(200H2O)	194.1976		-331.17				
724	K2CR1O4(300H2O)	194.1976		-331.09				
725	K2CR1O4(400H2O)	194.1976		-331.06				
726	K2CR1O4(500H2O)	194.1976		-331.04				
727	K2CR1O4(600H2O)	194.1976		-331.03				
728	K2CR1O4(800H2O)	194.1976		-331.02				
729	K2CR1O4(1000H2O)	194.1976		-331.03				
730	K2CR1O4(2000H2O)	194.1976		-331.06				
731	K2CR1O4(4000H2O)	194.1976		-331.09				
732	K2CR1O4(5000H2O)	194.1976		-331.10				
733	K2CR1O4(10000H2O)	194.1976		-331.12				
734	K2CR1O4(20000H2O)	194.1976		-331.15				
735	K2CR1O4(50000H2O)	194.1976		-331.18				
736	K2CR1O4(100000H2O)	194.1976		-331.19				
737	K2CR1O4(0.7H2S1O4+700H2O)	194.1976		-332.31				
738	K2CR1O4(1.400H2S1O4+700H2O)	194.1976		-332.59				
739	K2CR1O4(3.500H2S1O4+700H2O)	194.1976		-332.87				
740	K2CR1O4(7.000H2S1O4+700H2O)	194.1976		-333.03				
741	K2CR1O4(14.000H2S1O4+700H2O)	194.1976		-333.31				
742	K2CR1O4(17.500H2S1O4+700H2O)	194.1976		-333.47				
743	K2CR1O4(35.00H2S1O4+700H2O)	194.1976		-334.35				
744	K2CR1O4(70.000H2S1O4+700H2O)	194.1976		-336.91				
745	K2CR1O4(87.500H2S1O4+700H2O)	194.1976		-338.51				
746	K2CR1O4(140.000H2S1O4+700H2O)	194.1976		-343.69				
747	K2CR1O4(175.00H2S1O4+700H2O)	194.1976		-347.96				
748	K2CR2O7(C)	294.1918		-492.8	-449.9		69.6	52.50
749	K2CR2O7(A)	294.1918		-476.8	-446.4		111.6	
750	K2CR2O7(200H2O)	294.1918		-477.5				
751	K2CR2O7(400H2O)	294.1918		-477.3				
752	K2CR2O7(500H2O)	294.1918		-477.1				
753	K2CR2O7(600H2O)	294.1918		-477.0				
754	K2CR2O7(700H2O)	294.1918		-476.9				
755	K2CR2O7(800H2O)	294.1918		-476.8				
756	K2CR2O7(900H2O)	294.1918		-476.7				
757	K2CR2O7(1000H2O)	294.1918		-476.6				
758	K2CR2O7(1500H2O)	294.1918		-476.4				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

		FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
759	K2CR207(2000H2O)	294.1918		-476.2				
760	K2CR207(3000H2O)	294.1918		-475.8				
761	K2CR207(4000H2O)	294.1918		-475.6				
762	K2CR207(5000H2O)	294.1918		-475.5				
763	K2CR207(10000H2O)	294.1918		-474.2				
764	K2CR207(0.1H1CL104+1000H2O)	294.1918		-474.0				
765	K2CR207(0.14H1CL104+1500H2O)	294.1918		-473.6				
766	K2CR207(0.23H1CL104+25000H2O)	294.1918		-473.0				
767	K2CR207(2.800H2S104+28000H2O)	294.1918		-475.86				
768	K2CR207(5.600H2S104+2800H2O)	294.1918		-475.90				
769	K2CR207(14.00H2S104+2800H2O)	294.1918		-475.82				
770	K2CR207(28.00H2S104+2800H2O)	294.1918		-475.74				
771	K2CR207(56.00H2S104+2800H2O)	294.1918		-475.60				
772	K2CR207(70.00H2S104+2800H2O)	294.1918		-475.64				
773	K2CR207(140.00H2S104+2800H2O)	294.1918		-475.78				
774	K2CR207(280.0H2S104+2800H2O)	294.1918		-478.64				
775	K2CR207(350.0H2S104+2800H2O)	294.1918		-480.56				
776	K2CR207(560.0H2S104+2800H2O)	294.1918		-486.84				
777	K2CR207(700.0H2S104+2800H2O)	294.1918		-493.60				
778	K2CR207(800.0H2S104+2800H2O)	294.1918		-501.00				
779	K2CR204:CR103(C)	346.1878		-608.				
780	K1H1CR104(A)	156.1036		-270.2	-250.5		68.5	
781	K3CR104F(C)	252.2980		-470.6				
782	K1CL:CR103(C)	174.5492		-248.7				
783	K1CR(S104)2(C)	283.2212		-512.				
784	K1CR(S104)2(AU)	283.2212		-562.0				
785	K1CR(S104)2:H2O(C)	301.2366		-592.				
786	K1CR(S104)2:2H2O(C)	319.2520		-669.				
787	K1CR(S104)2:6H2O(C)	391.3136		-966.0				
788	K1CR(S104)2:12H2O(C)	499.4060		-1389.2				
789	K1N1H4CR104(C)	173.1343		-307.8				
790	K1N1H4CR104(AU)	173.1343		-302.5				
791	K2MO104(C)	238.1416		-358.2				
792	K2MO104(A)	238.1416		-359.1	-335.3		55.5	
793	K2MO104(AU)	238.1416		-358.9				
794	K2W104(A)	326.0516		-377.7				
795	K5H1W6021(A)	1635.6054		-1697.2				
796	K1W1CL6(C)	435.6700		-235.4				
797	K2W1CL7(C)	510.2250		-338.4				
798	K1V103(C)	138.0422		-276.0				

NBS ALKALI METAL CMPD. THERMO. PROPS. (TN 270 SERIES) IN KCAL/MOL AND CAL/MOL.K

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
799 K1V1O3(A)	138.0422		-272.6	-255.0		37.	
800 K3V1O4(A)	232.2456			-418.0			
801 K1H2V1O4(A)	156.0576		-340.9	-311.7		54.	
802 K1H3V2O7(A)	256.0058			-513.2			
803 K3H1V2O7(A)	332.1938			-631.5			
804 K4H2V1OO28(A)	1115.8272			-2117.			
805 K5H1V1OO28(A)	1153.9212		-2380.	-2180.		176.	
806 K1TA1F6(A)	334.0404			-276.9			
807 K2TA1F7(A)	392.1408			-415.6			
808 K1MG1FE(C1N)6(A)	275.3684			-5.9			
809 K2MG1FE(C1N)6(A)	314.4704			-83.2			
810 K1CA1FE(C1N)6(A)	291.1364			-29.6			
811 K2CA1FE(C1N)6(A)	330.2384			-106.8			
812 K1SR1FE(C1N)6(A)	338.6764			-31.0			

NBS RUBIDIUM CMPDS THERMC PRCPS (IN270 SERIES) IN KCAL/MOL AND CAL/MOL.K 3/76

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
1 RB(CS)	85.4678	0	0	0	1.790	18.35	7.424
					+-0.005	+-0.07	+-0.005
HULTGREN,R.; DESAI, P. D.; HAWKINS, D. T.; GLEISER, M.; KELLEY, K. K.; AND WAGMAN, D. D. 'SELECTED VALUES OF THE THERMODYNAMIC PROPERTIES OF THE ELEMENTS' (AMER. SOC. METALS, METALS PARK, OH, 1973)							
2 RB(G)	85.4678	19.639	19.33	12.69	1.481	40.626	4.968
		+-0.050	+-0.05	+-0.05	+-0.002	+-0.005	+-0.004
THERMAL FUNCTIONS FROM STATISTICAL CALCULATIONS IN HULTGREN,R.; DESAI, P. D.; HAWKINS, D. T.; GLEISER, M.; KELLEY, K. K.; AND WAGMAN, D. D. 'SELECTED VALUES OF THE THERMODYNAMIC PROPERTIES OF THE ELEMENTS' (AMER. SOC. METALS, METALS PARK, OH, 1973)							
3 RB+(G)	85.4678	115.965	117.137				
		+-0.050	+-0.050				
4 RB+2(G)	85.4678	745.10	747.76				
		+-0.06	+-0.06				
5 RB+3(G)	85.4678	1660.0	1664.1				
		+-2.0	+-2.0				
6 RB+(A)	85.4678		-60.03	-67.87		29.04	
			+-0.03	+-0.03		+-0.05	
7 RB1O2(C)	117.4666		-66.6				
			+-0.5				
8 RB2O(C)	186.9350		-81.				
			+-3.				
9 RB2O(G)	186.9350		-12.				
			+-5.				
10 RB2O2(C)	202.9344		-112.8				
			+-2.5				
11 RB1H(C)	86.4758		-12.5				
			+-0.3				
12 RB1O1H(C)	102.4752		-99.95				
			+-0.15				
13 RB1O1H(G)	102.4752	-56.	-57.				
		+-2.	+-2.				
14 RB1O1H(A)	102.4752		-115.00	-105.46		26.47	
			+-0.03	+-0.03		+-0.05	
15 RB1O1H:B2O(C)	120.4906		-178.98				
			+-0.15				
16 RB1O1H:2H2O(C)	138.5060		-251.73				
			+-0.15				
17 (RB1O1H)2(G)	204.9504		-157.				
			+-12.				

NPS RUBIDIUM CMPDS THERMO PROPS (TN270 SERIES) IN KCAL/MOL AND CAL/MOL.K 3/76

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
18 RB1F(C)	104.4662		-133.3 +-0.2				
19 RB1F(G)	104.4662	-78.65 +-1.12	-79.2 +-1.1	-83.4 +-1.5	2.29 +-0.15	56.6 +-1.0	8.53 +-0.15
SPECTRAL DATA FROM ROSEN. BOND LENGTH FROM AKISHIN AND RAMBIDI, ZHUR. NEORG. KHIM, 4, 768 (1959)							
20 RB1F(A)	104.4662		-139.53 +-0.08	-134.51 +-0.08		25.7 +-0.3	
21 RB1F(100H2O)	104.4662		-139.39 +-0.08				
22 RB1F(150H2O)	104.4662		-139.40 +-0.08				
23 RB1F(200H2O)	104.4662		-139.408 +-0.080				
24 RB1F(300H2O)	104.4662		-139.419 +-0.080				
25 RB1F(400H2O)	104.4662		-139.428 +-0.080				
26 RB1F(500H2O)	104.4662		-139.435 +-0.080				
27 RB1F(600H2O)	104.4662		-139.441 +-0.080				
28 RB1F(800H2O)	104.4662		-139.450 +-0.080				
29 RB1F(1000H2O)	104.4662		-139.456 +-0.080				
30 RB1F(1500H2O)	104.4662		-139.467 +-0.080				
31 RB1F(2000H2O)	104.4662		-139.473 +-0.080				
32 RB1F(3000H2O)	104.4662		-139.482 +-0.080				
33 RB1F(5000H2O)	104.4662		-139.491 +-0.080				
34 RB1F(10000H2O)	104.4662		-139.501 +-0.080				
35 RB1F(20000H2O)	104.4662		-139.509 +-0.080				
36 RB1F(50000H2O)	104.4662		-139.517 +-0.080				
37 RB1F(100000H2O)	104.4662		-139.520 +-0.080				
38 RB1F:1.5H2O(C)	131.4893		-242.3 +-0.3				

NBS RUBIDIUM CMPDS THERMO PROPS (TN270 SERIES) IN KCAL/MOL AND CAL/MOL.K 3/76

	FORMULA WT	DHO	DH298	DG298	H298 - HO	S298	CP298
39 RB1F(H1C1O1N1H2;S) IN FORMAMIDE	104.4662		-138.57 +-0.20				
40 RB2F2(G)	208.9324		-204. +-5.				
41 RB1H1F2(C) THERMAL FUNCTIONS FROM BURNEY, G. A.; AND WESTRUM, E. F., JR.; J. PHYS. CHEM. 65, 349 (1961)	124.4726	-219.52 +-0.21	-220.5 +-0.2	-204.5 +-0.2	3.932 +-0.004	28.7 +-0.0	18.97 +-0.02
42 RB1CL(C) THERMAL FUNCTIONS FROM PAUKOV, I.E.; AND KHRIPLOVICH, L. M.; ZHUR. FIZ. KHIM. 43, 2678 (1969), REINTEGRATED AT NBS	120.9208	-104.080 +-0.051	-104.05 +-0.05	-97.47 +-0.05	2.917 +-0.004	22.92 +-0.04	12.52 +-0.04
43 RB1CL(G) SPECTRAL DATA FROM ROSEN. BOND LENGTH FROM AKISHIN AND RAMBIDI, ZHUR. NEORG. KHIM, 4, 768 (1959)	120.9208	-55.11 +-1.12	-55.6 +-1.1	-60.0 +-1.2	2.40 +-0.15	59.6 +-1.0	8.78 +-0.15
44 RB1CL(A)	120.9208		-99.98 +-0.03	-99.24 +-0.03		42.54 +-0.05	
45 RB1CL(5OH1C1O1O1H) IN FORMIC ACID	120.9208		-103.1 +-0.1				
46 RB1CL(H1C1O1N1H2;S) IN FORMAMIDE	120.9208		-103.35 +-0.05				
47 RB1CL(H1C1O1N1H1C1H3;S) IN N-METHYLFORMAMIDE	120.9208		-103.21 +-0.05				
48 RB1CL(C4H8O2;S) IN 20 PERCENT DIOXANE-WATER	120.9208		-100.38 +-0.05				
49 RB1CL(C1H3O1H;U) IN METHANOL	120.9208		-101.86 +-0.08				
50 (RB1CL)2(G)	241.8416		-150. +-5.				
51 RB1CL1O3(C) S AND CP FROM KELLEY, K. K.; AND KING, E. G.; US BUR. MINES BULL. 592, 149P (1961)	168.9190		-95.1 +-0.3	-70.6 +-0.3		36.3 +-0.4	24.66 +-0.05
52 RB1CL1O3(A)	168.9190		-83.7 +-0.2	-68.7 +-0.2		67.8 +-0.5	
53 RB1CL1O4(C)	184.9184		-104.50 +-0.10	-73.54 +-0.10		39.2 +-0.5	
54 RB1CL1O4(A)	184.9184		-90.94 +-0.08	-69.93 +-0.08		72.5 +-0.5	
55 RB1CL1O4(C4H8S1O2) IN SULFOLANE	184.9184		-102.25 +-0.25				
56 RB1CL1O4(H1C1O1N1H2;S) IN FORMAMIDE	184.9184		-100.36 +-0.13				

NBS RUBIDIUM CMPDS THERMO PROPS (TN270 SERIES) IN KCAL/MOL AND CAL/MOL.K 3/76

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
57 RB1CL1O4(H1C1O1N1H1C1H3:S) IN N-METHYLFORMAMIDE	184.9184		-101.70 +-0.13				
58 RB1CL1O4(H1C1O1N(C1H3)2:S) IN N,N-DIMETHYLFORMAMIDE	184.9184		-106.35 +-0.13				
59 RB1BR(C) THERMAL FUNCTIONS FROM CLUSIUS, K.: GOLDMANN, J.; AND PERLICK, A.; Z. NATURFORSCH. 4A, 424 (1949), REINTEGRATED AT NBS	165.3768	-92.714 +-0.052	-94.31 +-0.05	-91.24 +-0.05	3.124 +-0.005	26.28 +-0.05	12.63 +-0.01
60 RB1BR(G) SPECTRAL DATA FROM ROSEN. BOND LENGTH FROM AKISHIN AND RAMBIDI, ZHUR. NEORG. KHIM, 4, 768 (1959)	165.3768	-42.15 +-1.02	-44.4 +-1.0	-52.1 +-1.3	2.47 +-0.15	62.4 +-1.0	8.87 +-0.15
61 RB1BR(A)	165.3768		-89.08 +-0.08	-92.72 +-0.08		48.74 +-0.05	
62 RB1BR(H1C1O1N1H2:S) IN FORMAMIDE	165.3768		-93.56 +-0.25				
63 RB1BR3(C)	325.1948		-100.0 +-1.3				
64 RB1BR1O3(C)	213.3750		-91.72 +-0.50	-70.52 +-0.50		38.9 +-0.9	
65 RB1BR1O3(A)	213.3750		-80.0 +-0.4	-67.5 +-0.4		68.0 +-0.8	
66 RB1BR1CL2(C)	236.2828		-116.0 +-1.5	-99.7 +-0.5		35.1 +-2.0	
67 RB1BR2CL(C)	280.7388		-112.5 +-1.0	-99.1 +-0.5		36.6 +-2.0	
68 RB1I(C) THERMAL FUNCTIONS FROM CLUSIUS, K.; GOLDMANN, J.; AND PERLICK, A.; Z. NATURFORSCH. 4A, 424 (1949), REINTEGRATED AT NBS	212.3722	-79.593 +-0.123	-79.77 +-0.12	-78.60 +-0.07	3.190 +-0.010	28.30 +-0.05	12.71 +-0.05
69 RB1I(G) SPECTRAL DATA FROM ROSEN. BOND LENGTH FROM AKISHIN AND RAMBIDI, ZHUR. NEORG. KHIM, 4, 768 (1959)	212.3722	-31.74 +-1.12	-32.6 +-1.1	-42.2 +-1.3	2.51 +-0.15	64.3 +-1.0	8.92 +-0.15
70 RB1I(A)	212.3722		-73.22 +-0.07	-80.20 +-0.07		55.6 +-0.5	
71 RB1I(1000N1H2C1H2C1H2N1H2) ETHYLENEDIAMINE	212.3722		-84.20 +-0.15				
72 RB1I(H1C1O1N1H2:S) IN FORMAMIDE	212.3722		-79.47 +-0.13				
73 RB1I(H1C1O1N1H1C1H3:S) IN N-METHYLFORMAMIDE	212.3722		-78.16 +-0.15				
74 RB1I(H1C1O1N1(C1H3)2:S) IN N,N-DIMETHYLFORMAMIDE	212.3722		-86.32 +-0.15				

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
75 RB1I(C1H3C1O1N1H1C1H3;S2)	212.3722		-80.08				
			+-0.15				
IN N-METHYLACETAMIDE							
COMPOUND OUT OF ORDER*							
76 RB1I(C1H3C1N;U)	212.3722		-81.60				
			+-0.15				
IN ACETONITRILE							
77 RB1I3(C)	466.1810		-82.7	-81.0		54.3	
			+-0.3	+-0.1		+-0.5	
78 RB1I1O3(C)	260.3704			-101.9			
				+-0.7			
79 RB1I1O3(A)	260.3704		-112.9	-98.5		57.3	
			+-0.5	+-0.5		+-0.8	
80 RB1I1CL2(C)	283.2782		-106.1				
			+-1.0				
81 RB1I1CL4(C)	354.1842		-129.4	-105.3		58.	
			+-0.5	+-0.5		+-1.	
82 RB1I1BR2(C)	372.1902		-96.0				
			+-0.5				
83 RB1I1BR1CL(C)	327.7342		-102.3				
			+-0.5				
84 RB2S(C)	202.9996		-86.2				
			+-1.0				
85 RB2S(500H2O)	202.9996		-111.0				
			+-1.0				
86 RB1S2O8-(AQ)	277.5910		-378.7	-334.9		98.3	
			+-0.7	+-0.7		+-1.0	
87 RB2S1O4(C)	266.9972	-340.795	-343.12	-314.76	6.458	47.19	32.04
		+-0.075	+-0.07	+-0.07	+-0.010	+-0.05	+-0.05
THERMAL FUNCTIONS FROM PAUKOV, I. E.;							
AND LAVRENT'EVA, M. N.; ZHUR. FIZ. KHIM.							
42, 1842 (1968)							
88 RB2S1O4(G)	266.9972		-259.				
			+-6.				
89 RB2S1O4(A)	266.9972		-337.38	-313.71		62.9	
			+-0.05	+-0.05		+-0.5	
90 RB2S1O4(500H2O)	266.9972		-337.161				
			+-0.050				
91 RB2S1O4(800H2O)	266.9972		-337.156				
			+-0.050				
92 RB2S1O4(1000H2O)	266.9972		-337.157				
			+-0.050				
93 RB2S1O4(1500H2O)	266.9972		-337.164				
			+-0.050				
94 RB2S1O4(2000H2O)	266.9972		-337.170				
			+-0.050				
95 RB2S1O4(3000H2O)	266.9972		-337.183				
			+-0.050				

		FORMULA WT	DHO	DH298	DG298	H298 - HO	S298	CP298
96	RB2S1O4(5000H2O)	266.9972		-337.204 +-0.050				
97	RB2S1O4(10000H2O)	266.9972		-337.242 +-0.050				
98	RB2S1O4(20000H2O)	266.9972		-337.276 +-0.050				
99	RB2S1O4(50000H2O)	266.9972		-337.310 +-0.050				
100	RB2S1O4(100000H2O)	266.9972		-337.329 +-0.050				
101	RB2S1O4(200000H2O)	266.9972		-337.343 +-0.050				
102	RB2S1O4(500000H2O)	266.9972		-337.356 +-0.050				
103	RB1S1H(C) CP FROM TEICHERT, W.; Z. ANORG. ALLGEM. CHEM. 247, 113 (1941)	118.5398		-63.8 +-1.1				14.6 +-1.0
104	RB1S1H(1000H2O)	118.5398		-64.5 +-1.0				
105	RB1H1S1O4(C)	182.5374		-277.0 +-0.5				
106	RB1S1O2F(C)	168.5290		-225.7 +-0.7				
107	RB1I:3S1O2(C)	404.5606		-324.0 +-1.0				
108	RB2SE1O3(C)	297.8938		-225.7 +-0.5				
109	RB2SE1O4(C)	313.8932		-266.3 +-0.1				
110	RB1B1SE(C) CP FROM TEICHERT, W.; Z. ANORG. ALLGEM. CHEM. 247, 113 (1941)	165.4358		-57.2 +-0.5				15.7 +-1.0
111	RB2TE1OBR6(C)	777.9896		-401.6 +-0.5				
112	RB1N3(C)	127.4879		-0.9 +-0.1				
113	RB1N1O3(C) CP FROM MUSTAJOKI, A., ANN. ACAD. SCI. FENNICAE [A] VI,NO 9,16P (1958)	147.4727		-118.32 +-0.05	-94.61 +-0.05		35.2 +-1.0	24.4 +-0.3
114	RB1N1O3(A)	147.4727		-109.59 +-0.05	-94.48 +-0.05		64.0 +-0.1	
115	RB1N1H2(C)	101.4905		-27.0 +-0.5				
116	RB1P2P1O4(C)	182.4552		-373.39 +-0.10				

NBS RUBIDIUM CMPDS THERMG PRGPS (TN270 SERIES) IN KCAL/MGL AND CAL/MGL.K 3/76

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
117 RB1P1F6(C)	230.4320		-562.8	-526.9		53.02	35.4
			+-1.0	+-1.0		+-0.15	+-0.1
THERMAL FUNCTIONS FROM STAVELEY, L. A. K.; GREY, N. R.; AND LAYZELL, M. J.; Z. NATURFORSCH. 18A, 148 (1963)							
118 RB1SP(C)	207.2178		-23.9				
			+-1.5				
119 RB1SB2(C)	328.9678		-24.5				
			+-1.5				
120 RB3SB(C)	378.1534		-41.5				
			+-1.0				
121 RB3SB7(C)	1108.6534		-74.1				
			+-5.0				
122 RB5SB4(C)	914.3390		-106.1				
			+-4.0				
123 SB1CL3;3RB1CL(C)	590.8714		-410.2				
			+-0.8				
124 (7RB1BR;3SB1BR3)(C)	2242.0686		-884.6				
			+-2.0				
125 RB2C1O3(C)	230.9450	-270.41	-271.5	-251.1	5.851	43.34	28.11
		+-0.22	+-0.2	+-0.5	+-0.010	+-0.10	+-0.06
THERMAL FUNCTIONS FROM PAUKOV, I. E.; KHRIPLOVICH, L. M.; AND LUK'YANOVA, I. G.; ZHUR. FIZ. KHIM. 45, 2451 (1971)							
126 RB2C1O3(A)	230.9450		-281.90	-261.91		44.5	
			+-0.10	+-0.10		+-1.0	
127 RB2C1O3(5.76H2O)	230.9450		-280.0				
			+-0.5				
128 RB2C1O3;H2O(C)	248.9604		-346.1				
			+-0.2				
129 RB2C1O3;1.5H2O(C)	257.9681		-383.4				
			+-0.2				
130 RB2C1O3;3.5H2O(C)	293.9989		-523.6				
			+-0.2				
131 RB1H1C1O3(C)	146.4852		-230.2	-206.3		28.7	
			+-0.4	+-0.7		+-1.0	
132 RB1H1C1O3(A)	146.4852		-225.42	-208.13		50.84	
			+-0.10	+-0.10		+-0.50	
133 (3RB2C1O3;2RB1H1C1O3;4.5H2O)(C)	1066.8747		-1606.2				
			+-0.8				
134 RB1C1N(C)	111.4857				4.159	33.67	16.20
					+-0.010	+-0.05	+-0.02
THERMAL FUNCTIONS FROM SUGISAKI, M.; MATSUO, T.; SUGA, H.; AND SEKI, S.; BULL. CHEM. SOC. JAPAN 41, 1747 (1968)							
135 RB2SI1F6(C)	313.0120		-695.9				
			+-2.5				
136 RB2GE1CL6(C)	456.2436		-350.0	-310.8		72.5	
			+-1.5	+-1.0		+-2.5	

NBS RUBIDIUM CMPDS THERMO PROPS (TN270 SERIES) IN KCAL/MOL AND CAL/MOL.K 3/76

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
137 RB2SN1CL6(C)	502.3436		-364.0	-328.6		90.25	54.27
			+-1.0	+-1.0		+-0.05	+-0.05
S AND CP FROM MORFEE, R. G. S.; STAVELEY, L. A. K.; WALTERS, S. T.; AND WIGLEY, D. L.; PHYS. CHEM. SOLIDS. 13, 132 (1960)							
138 RB2SN1BR6(C)	769.0796					106.4	54.54
						+-0.1	+-0.05
S AND CP FROM MORFEE, R. G. S.; STAVELEY, L. A. K.; WALTERS, S. T.; AND WIGLEY, D. L.; PHYS. CHEM. SOLIDS. 13, 132 (1960)							
139 PB1I2:2RB1I(C)	885.7432		-108.2				
			+-0.4				
140 PB1I2:2RB1I:4H2O(C)	957.8048		-488.9				
			+-0.5				
141 RB1B1O2(C)	128.2776				3.181	22.54	17.7
					+-0.010	+-0.06	+-0.1
THERMAL FUNCTIONS FROM PAUKOV, I. E.; KHRIPLOVICH, L. M.; AND POPOV, A. P.; ZHUR. FIZ. KHIM. 45, 1295 (1971)							
142 RB1B1F4(C)	172.2724		-449.3				22.7
			+-2.5				+-0.3
CP FROM DWORKIN, A. S.; AND BREDIG, M. A.; J. CHEM. ENG. DATA 15, 505 (1970)							
143 PB1B1CL4(C)	238.0908		-224.7				
			+-0.5				
144 RB1B1(CL1O4)4(C)	494.0812		-185.7				
			+-1.3				
145 RB1AL1(SE1O4)2:12H2O(C)	614.5493		-1303.3				
			+-2.5				
146 RB2ZN1CL4(C)	378.1176		-319.3				
			+-0.2				
147 RB2ZN1BR4(C)	555.9416		-277.14				
			+-0.03				
148 RB1CL:ZN1S1O4(C)	282.3524		-346.4				
			+-0.1				
149 CU1CL2:2RB1CL(C)	376.2876		-266.3				
			+-0.2				
150 CU1CL2:2RB1CL:4H2O(C)	448.3492		-547.2				
			+-0.2				
151 PB1AG4I5(C)	1151.4698	-138.82	-136.9	-143.0	17.092	149.	68.24
		+-1.05	+-1.0	+-0.1	+-0.010	+-1.	+-0.05
H-H0 AND CP FROM TOPAL, L. E.; AND OWENS, B. B.; J. PHYS. CHEM. 72, 2106 (1968)							
152 RB2AG1I3(C)	659.5188		-176.2	-175.2		85.	
			+-0.4	+-0.2		+-2.	
153 RB1NI1CL3(C)	250.5368		-182.7				
			+-0.2				
154 RB1CO1CL3(C)	250.7600		-184.4				
			+-0.3				

NBS RUBIDIUM CMPDS THERMG PRGPS (TN270 SERIES) IN KCAL/MGL AND CAL/MGL.K 3/76

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
155 RB2C01CL4(C)	371.6808		-288.3 +-0.3				
156 RB2C01CL5(C)	492.6016		-394.0 +-0.3				
157 RB1FE1CL3(C)	247.6738		-190.8 +-0.2				
158 RB2FE1CL4(C)	368.5946		-294.6 +-0.2				
159 RB2PT1CL4(C)	507.8376		-255.4 +-0.3				
160 RB2PT1CL6(C)	578.7436		-299. +-3.	-267. +-2.		99. +-5.	
161 RB1[PT1N1H3CL3](C)	403.9475		-182.4 +-0.3				
162 RB2IR1CL6(C)	575.8536		-282. +-4.				
163 RB1MN1CL3(C)	246.7648		-225.30 +-0.15				
164 RB1RE104(C)	335.6654		-255.9 +-0.3	-238.1 +-0.2		65.5 +-0.8	
165 RB2CR104(C)	286.9292		-338.0 +-2.0				
166 RB3CP104F(C)	391.3954		-472.1 +-2.0				
167 RB3CR1CL6(C)	521.1174		-461.2 +-0.6				
168 RB3CR2CL9(C)	679.4724		-604.0 +-0.8				
169 RB3V1CL6(C)	520.0634		-470.9 +-1.0				
170 RB3V2CL9(C)	677.3644		-616.6 +-1.3				
171 RB1NB103(C)	226.3720			-301.5 +-0.5			
172 RB1NB1CL6(C)	391.0918		-307.1 +-1.3				
173 RB2NB101CL5(C)	457.1060		-424. +-6.				
174 RB1TA1CL6(C)	479.1338		-326.9 +-0.8				
175 RB1TI1CL3(C)	239.7268		-250.1 +-1.5				
176 RB2TI1CL4(C)	360.6476		-358.0 +-2.0				

NBS RUBIDIUM CMPDS THERMO PROPS (TN270 SERIES) IN KCAL/MOL AND CAL/MOL.K 3/76

	FORMULA WT	DH0	DH298	DG298	H298 - H0	S298	CP298
177 RB2TI1CL6(C)	431.5536		-425. +-3.				
178 RB2TI1BR6(C)	698.2896		-359.7 +-0.8				
179 RB3TI1BR6(C)	783.7574		-425.9 +-0.7				
180 RB3TI2BR9(C)	1071.3844		-563.5 +-0.8				
181 RB1GD(FE(C1N)6)(C)	454.6722			-75.9 +-1.5			
182 RB1CE(FE(C1N)6):2H2O(C)	473.5730			-192.8 +-1.0			
183 TH1CL4:2RB1CL(C)	615.6917		-512.0 +-1.0				
184 TH1CL4:2RB1CL:9H2O(C)	777.8303		-1154.6 +-1.8				
185 TH1CL4:4RB1CL(C)	857.5333		-728.0 +-1.5				
186 RB2MG(SE1O4)2(6400H2O)	481.1628		-517.38 +-1.20				
187 RB2MG(SE1O4)2:6H2O(C)	589.2552		-937.6 +-1.2				
188 RB1CA1CL3(C)	231.9068		-295.5 +-0.2				
189 NA1RB2CR1CL6(C)	458.6394		-456.5 +-0.5				
190 K1RB1CL2(C)	195.4758		-208.87 +-0.05				

TOTAL COMPOUNDS 191

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16. ABSTRACT *(A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)*

Selected values are given for the thermochemical properties of the more common compounds of sodium and potassium. A more extensive set of selections is provided for rubidium compounds. The properties included, where data are available, are enthalpy of formation at 0 K and 298.15 K, $\Delta Hf(0)$ and $\Delta Hf(298)$, Gibbs energy of formation, entropy and heat capacity at 298.15 K, $\Delta Gf(298)$, $S(298)$ and $Cp(298)$ and the enthalpy difference between 0 K and 298.15 K, $H(298)-H(0)$. The values are consistent with the tables issued earlier in the NBS Technical Note 270 series.

17. KEY WORDS *(six to twelve entries; alphabetical order, capitalize only the first letter of the first key word unless a proper name; separated by semicolons)* Enthalpy; entropy; Gibbs energy; heat capacity; potassium compounds; rubidium compounds; sodium compounds; standard reference data; thermochemical tables.

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